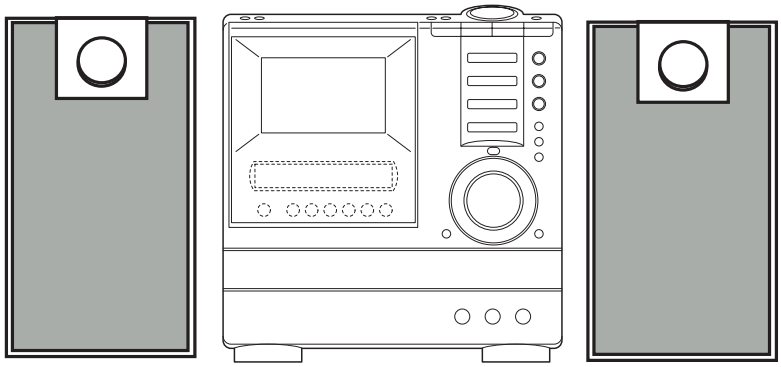
aiwa SERVICE

XS-V30 HR



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC TAPE MECHANISM : BZM–1 R1NM
BASIC CD MECHANISM : BZG–5 MVSD3N8M

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
XS–V30	CX–GV30	SX–G3	RC–BAS05 VS

- If requiring information about the CD mechanism, see Service Manual of BZG-5, (S/M Code No. 09-00C-353-3N8).

aiwa

S/M Code No. 09-01B-449-9R1

SPECIFICATIONS

MAIN UNIT CX-GV30

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	13.2 dBf
FM antenna terminals	75 ohms (unbalanced)
MW tuner range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
MW usable sensitivity	350 µV/m
MW antenna	Loop antenna
SW tuning range	5.730 MHz – 17.900 MHz
SW antenna	Wire antenna

AMPLIFIER

Power output	Rated: 96 W + 96 W (6 ohms, T.H.D. 1 %, 1 kHz) Reference: 120 W + 120 W (6 ohms, T.H.D. 10 %, 1 kHz)
Total harmonic distortion	0.08 % (60 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO / AUX: 700 mV MIC: 1.0 mV (10 kohms)
Outputs	SPEAKERS: 6 ohms or more SURROUND SPEAKERS : 8 ohms to 16 ohms SUB WOOFERS: 2.4V PHONES: 32 ohms or more VIDEO OUT: 1.0 Vp-p (75 ohms)

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 15 kHz
Recording system	AC bias
Heads	recording/playback x 1, erase x 1

DISC PLAYER

Laser	Semiconductor laser (λ =780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Video Signal	NTSC/PAL color system (selectable)
Video data	MPEG 1
Audio data	MPEG 1, Layer 2 (VCD) MPEG 1, Layer 3 (MP3-CD)

GENERAL

Power requirements	120 V / 220 – 230 V / 240 V AC (Switchable), 50 Hz / 60 Hz
Power consumption	157 W
Power consumption in standby mode	With ECO mode on : 0.6 W With ECO mode off : 24 W
Dimensions (W x H x D)	260 x 272 x 359 mm
Weight	9.3 kg

SPEAKER SYSTEM SX-G3

Speaker system	2 way, bass reflex (magnetic shielded)
Speaker units	Woofer: 140 mm cone Tweeter: 60 mm ceramic
Impedance	6 ohms
Dimensions (W x H x D)	165 x 328 x 250 mm
Weight	3.5 kg

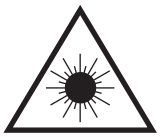
• Design and specifications are subject to change without notice.

• The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound,Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

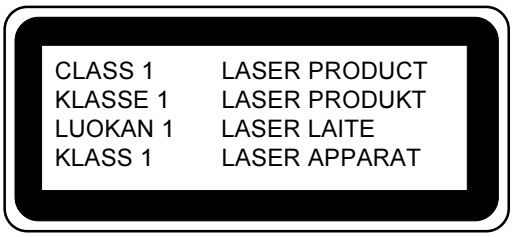
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



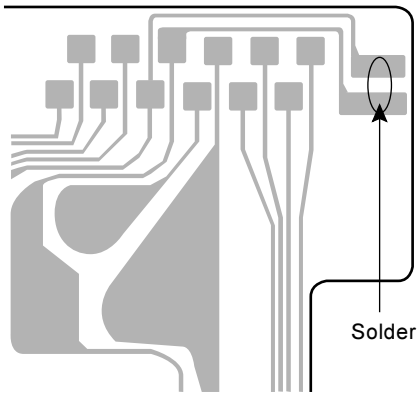
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

CD PICK-UP Assy PWB



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

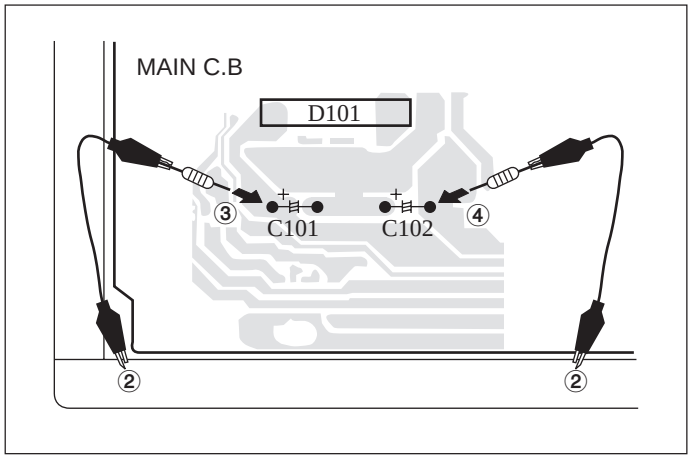


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

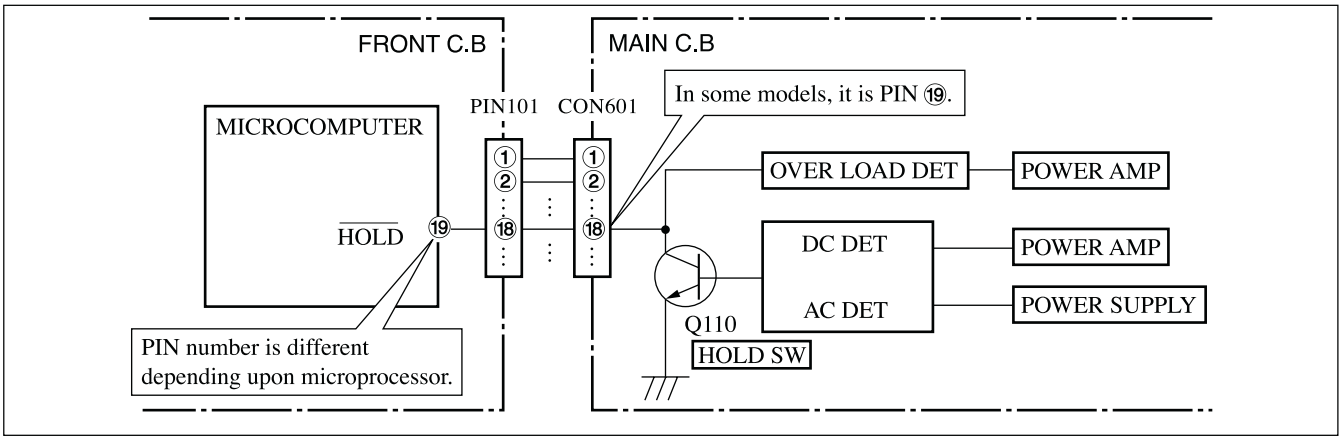


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

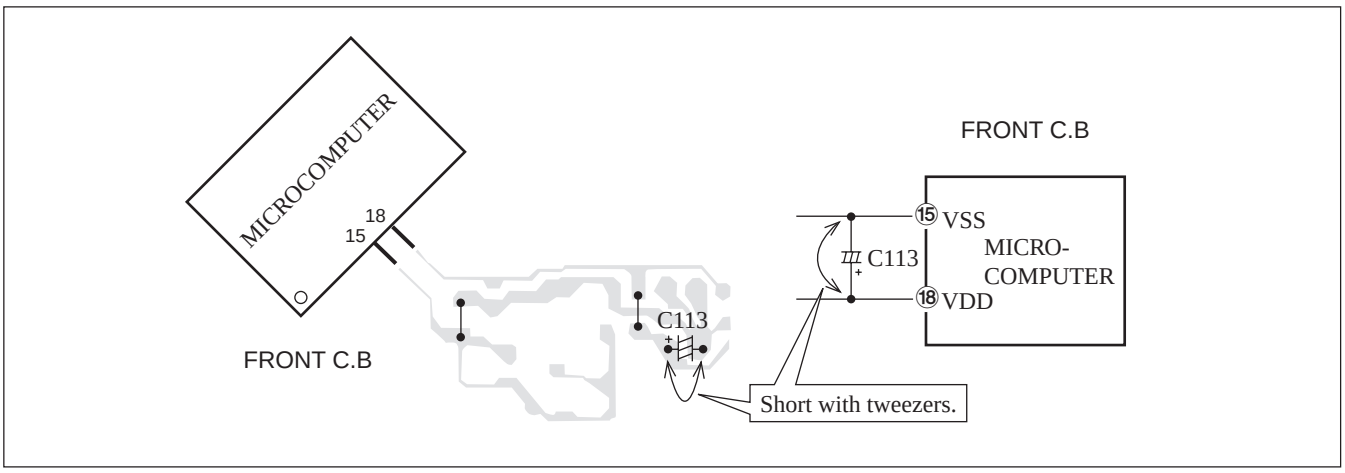


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8B-NH8-646-010		C-IC,LC877264V-5Y59
	87-A21-831-010		IC,SPS-422-1-F1
	87-A21-419-040		C-IC,NJM14558MD-TE2
	87-A21-893-040		C-IC,NJM14558V-TE2
	87-A21-401-040		C-IC,M61503FP
	87-070-289-040		IC,BU2092F
	87-A21-695-010		IC,LA1845L
	87-A21-928-010		IC,LC72131D-N
	87-020-454-010		IC,DN6851
TRANSISTOR			
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-494-080		TR,2SA1980G
	87-A30-484-080		C-TR,KRA102S
	87-A30-490-080		C-TR,KRC107S
	87-A30-162-010		FET,2SK2937
	87-A30-495-080		TR,2SA1981Y
	87-A30-468-080		C-TR,KRC102S-RTK
	87-A30-091-080		FET,2SJ460
	87-A30-062-080		C-TR,KRC104S
	87-A30-063-080		C-TR,KRA104S
	87-A30-087-080		C-FET,2SK2158
	87-A30-090-080		FET,2SK2541
	89-327-143-080		C-TR,2SC2714O
	87-A30-489-080		C-TR,KRA107S
	89-503-602-080		C-FET,2SK360E
	87-A30-086-040		C-TR,CSD1306E
	87-A30-615-080		TR,STC250
	89-213-702-010		TR,2SB1370E
	87-026-610-080		TR,KTC3198GR
	87-A30-098-010		TR,FP1016
	87-A30-097-010		TR,FN1016
	87-A30-673-080		TR,2N5551C (KEC)
	87-A30-196-080		TR,2SC4115SRS
	87-A30-663-040		C-TR,2SB792A(RS)
	87-A30-662-040		C-TR,2SD814A(RS)
	87-A30-200-080		TR,2SA1585SR
DIODE			
	87-A40-393-090		DIODE,1N5402GW(F20)
	87-A40-291-080		DIODE,1N4148M(CPT)
	87-A40-488-080		DIODE,1SS244
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-748-080		ZENER,UZ5.6BSA
	87-A40-839-090		DIODE,G5SBA60L-6088
	87-A40-749-080		ZENER,UZ5.6BSB
	87-A40-739-080		ZENER,UZ2.7BSA
	87-017-149-080		ZENER,HZS6A2L
	87-A40-747-080		ZENER,UZ5.1BSB
MAIN C.B			
C3	87-A12-317-080		C-CAP,U 0.1-50 F
C4	87-A12-317-080		C-CAP,U 0.1-50 F
C5	87-A12-317-080		C-CAP,U 0.1-50 F
C6	87-A12-317-080		C-CAP,U 0.1-50 F
C9	87-010-759-080		C-CAP,U 0.1-25 Z F
C10	87-010-759-080		C-CAP,U 0.1-25 Z F
C11	87-010-759-080		C-CAP,U 0.1-25 Z F
C12	87-010-759-080		C-CAP,U, 0.1-25 Z F
C19	87-A12-875-000		CAP,E 3300-65 M 85 IV
C20	87-A12-875-000		CAP,E 3300-65 M 85 IV
C21	87-A12-780-090		CAP,E 4700-35 M 85 SKR
C22	87-A12-780-090		CAP,E 4700-35 M 85 SKR
C32	87-012-286-080		CAP,U 0.01-25 K B
C34	87-A12-072-080		CAP,E 100-25 SMG
C35	87-A12-092-080		CAP,E 22-50 SMG
C36	87-A12-066-080		CAP,E 47-16 SMG
C38	87-012-286-080		CAP, U 0.01-25 K B
C60	87-A12-089-080		CAP,E 3.3-50 SMG
C61	87-A12-071-080		CAP,E 47-25 SMG
C83	87-A12-074-080		CAP,E 470-25 SMG
C97	87-010-831-080		C-CAP,U,0.1-16F
C101	87-012-279-080		C-CAP,U 2700P-50 B
C102	87-012-279-080		C-CAP,U 2700P-50 B
C103	87-A12-084-080		CAP,E 0.22-50 SMG
C104	87-A12-084-080		CAP,E 0.22-50 SMG
C105	87-012-277-080		C-CAP, U 1800P-50 B
C107	87-A12-089-080		CAP,E 3.3-50 SMG
C108	87-A12-089-080		CAP,E 3.3-50 SMG
C111	87-A12-077-080		CAP,E 33-35 SMG
C112	87-A12-077-080		CAP,E 33-35 SMG
C113	87-A10-596-080		C-CAP,S 100P-100 J CH
C114	87-A10-596-080		C-CAP,S 100P-100 J CH
C117	87-A12-317-080		C-CAP,U 0.1-50 F
C118	87-A12-317-080		C-CAP,U 0.1-50 F
C119	87-012-286-080		CAP, U 0.01-25
C120	87-012-286-080		CAP, U 0.01-25
C123	87-010-177-080		C-CAP,S 820P-50 SL
C124	87-010-177-080		C-CAP,S 820P-50 SL
C133	87-012-282-080		CAP, U 4700P-50
C140	87-012-280-080		C-CAP,U 3300P-50 B
C186	87-010-759-080		C-CAP,U, 0.1-25F
C187	87-010-866-080		CAP,E 10-63 M VX
C188	87-010-866-080		CAP,E 10-63 M VX
C225	87-A12-317-080		C-CAP,U 0.1-50 F
C226	87-A12-317-080		C-CAP,U 0.1-50 F
C227	87-A12-317-080		C-CAP,U 0.1-50 F
C228	87-A12-317-080		C-CAP,U 0.1-50 F
C229	87-010-191-080		C-CAP,S 0.015-50 Z F GRM
C230	87-010-191-080		C-CAP,S 0.015-50 Z F GRM
C231	87-012-286-080		C-CAP,U 0.01-25 KB
C232	87-012-286-080		C-CAP,U 0.01-25 KB
C235	87-A12-094-080		CAP,E 47-50 SMG
C236	87-A12-094-080		CAP,E 47-50 SMG
C303	87-012-275-080		C-CAP,U 1200P-50 B
C304	87-012-275-080		C-CAP,U 1200P-50 B
C307	87-A12-062-080		CAP,E 100-10 SMG
C308	87-A12-062-080		CAP,E 100-10 SMG
C309	87-012-188-080		C-CAP,U 47P-50 CH
C310	87-012-188-080		C-CAP,U 47P-50 CH
C313	87-012-284-080		CAP, U 6800P-50
C314	87-012-284-080		CAP, U 6800P-50
C315	87-A12-062-080		CAP,E 100-10 SMG
C317	87-A12-085-080		CAP,E 0.33-50 SMG
C318	87-A12-085-080		CAP,E 0.33-50 SMG
C326	87-010-787-080		CAP, U 0.022-25
C327	87-010-831-080		C-CAP,U,0.1-16F
C360	87-A12-087-080		CAP,E 1-50 SMG
C399	87-A10-039-080		C-CAP,U 470P-50 J CH
C401	87-A12-083-080		CAP,E 0.1-50 SMG
C402	87-A12-083-080		CAP,E 0.1-50 SMG
C403	87-012-193-080		C-CAP,U 82P-50 CH
C404	87-012-193-080		C-CAP,U 82P-50 CH
C405	87-012-286-080		CAP, U 0.01-25
C406	87-012-286-080		CAP, U 0.01-25
C407	87-012-286-080		CAP, U 0.01-25
C408	87-012-286-080		CAP, U 0.01-25
C409	87-012-278-080		C-CAP,U 2200P-50 B
C410	87-012-278-080		C-CAP,U 2200P-50 B
C411	87-A12-091-080		CAP,E 10-50 SMG
C412	87-A12-091-080		CAP,E 10-50 SMG

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C452	87-A12-069-080		CAP,E 22-25 SMG
C453	87-012-279-080		C-CAP,U 2700P-50 B@
C454	87-012-279-080		C-CAP,U 2700P-50 B
C455	87-012-279-080		C-CAP,U 2700P-50 B
C456	87-012-286-080		CAP, U 0.01-25
C457	87-A12-361-080		CAP,M 5600P-100 J CP
C458	87-012-274-080		CHIP CAP,U 1000P-50B
C459	87-012-271-080		CAP, U 560P-50
C460	87-010-831-080		C-CAP,U,0.1-16F
C461	87-012-158-080		C-CAP,S 390P-50 CH
C462	87-012-158-080		C-CAP,S 390P-50 CH
C470	87-018-127-080		CAP, CER 470P-50V
C501	87-A12-087-080		CAP,E 1-50 SMG
C502	87-A12-090-080		CAP,E 4.7-50 SMG
C503	87-A12-071-080		CAP,E 47-25 SMG
C605	87-012-280-080		CAP, U 3300P-50
C606	87-012-280-080		CAP, U 3300P-50
C609	87-010-785-080		C-CAP,U0.015-25BK
C610	87-010-785-080		C-CAP,U0.015-25BK
C611	87-A12-084-080		CAP,E 0.22-50 SMG
C612	87-A12-084-080		CAP,E 0.22-50 SMG
C613	87-A12-084-080		CAP,E 0.22-50 SMG
C614	87-A12-084-080		CAP,E 0.22-50 SMG
C615	87-012-172-080		CAPACITOR CHIP U 10P CH
C616	87-010-221-080		CAP, ELECT 470-10V
C617	87-010-221-080		CAP, ELECT 470-10V
C618	87-A12-091-080		CAP,E 10-50 SMG
C620	87-A12-062-080		CAP,E 100-10 SMG
C623	87-A12-084-080		CAP, ELECT 0.22-50 SMG
C624	87-A12-084-080		CAP, ELECT 0.22-50 SMG
C630	87-A10-260-080		C-CAP,U 0.1-16 K B
C631	87-012-281-080		C-CAP,U 3900P-50 B
C632	87-012-281-080		C-CAP,U 3900P-50 B
C633	87-A11-070-080		C-CAP,U 0.033-16 K B
C634	87-A11-070-080		C-CAP,U 0.033-16 K B
C640	87-A11-144-080		CAP,TC U 0.1-50
C641	87-A11-144-080		CAP,TC U 0.1-50
C661	87-012-336-080		C-CAP,U 330P-50 J SL
C662	87-012-336-080		C-CAP,U 330P-50 J SL
C669	87-012-274-080		C-CAP,U 1000P-50 KB
C670	87-012-274-080		C-CAP,U 1000P-50 KB
C671	87-010-759-080		C-CAP,U, 0.1-25 F
C672	87-010-759-080		C-CAP,U, 0.1-25 F
C673	87-012-278-080		C-CAP,U 2200P-50
C677	87-012-286-080		CAP, U 0.01-25
C685	87-010-759-080		C-CAP,U 0.1-25 Z F
C686	87-A11-144-080		CAP,TC U 0.1-50 K B
C771	87-A12-062-080		CAP,E 100-10 SMG
C772	87-012-286-080		CAP, U 0.01-25
C782	87-012-286-080		CAP, U 0.01-25
C783	87-012-286-080		CAP, U 0.01-25
C784	87-012-286-080		CAP, U 0.01-25
C785	87-012-286-080		CAP, U 0.01-25
C786	87-012-286-080		CAP, U 0.01-25
C788	87-012-167-080		C-CAP,U 5P-50 CH
C789	87-016-118-080		C-CAP,U 0.022-25 JB GRM
C790	87-016-118-080		C-CAP,U 0.022-25 JB GRM
C791	87-010-831-080		C-CAP,U,0.1-16 F
C792	87-012-286-080		CAP,U 0.01-25
C793	87-A12-090-080		CAP,E 4.7-50 SMG
C795	87-012-286-080		CAP, U 0.01-25
C796	87-012-286-080		CAP, U 0.01-25
C797	87-A12-091-080		CAP,E 10-50 SMG
C798	87-012-286-080		CAP,U 0.01-25
C799	87-A12-093-080		CAP,E 33-50 SMG
C800	87-010-829-080		CAP,U 0.047-16
C801	87-A12-089-080		CAP,E 3.3-50 SMG
C802	87-010-829-080		CAP, U 0.047-16
C803	87-010-787-080		CAP, U 0.022-25
C804	87-A12-062-080		CAP,E 100-10 SMG
C807	87-A12-086-080		CAP,E 0.47-50 SMG
C808	87-A12-087-080		CAP,E 1-50 SMG
C809	87-A12-087-080		CAP,E 1-50 SMG
C810	87-010-831-080		C-CAP,U,0.1-16F
C814	87-012-286-080		CAP, U 0.01-25
C815	87-A12-086-080		CAP,E 0.47-50 SMG
C816	87-A12-086-080		CAP,E 0.47-50 SMG
C821	87-A12-091-080		CAP,E 10-50 SMG
C823	87-010-177-080		C-CAP,S 820P-50 J C2012 SL
C824	87-A12-090-080		CAP,E 4.7-50 SMG
C825	87-010-596-080		CAP, S 0.047-16
C842	87-012-286-080		CAP, U 0.01-25
C843	87-012-286-080		CAP, U 0.01-25
C844	87-012-286-080		CAP, U 0.01-25
C845	87-012-286-080		CAP, U 0.01-25
C846	87-012-286-080		CAP, U 0.01-25
C849	87-012-286-080		CAP, U 0.01-25
C850	87-A12-071-080		CAP,E 47-25 SMG
C851	87-012-286-080		CAP, U 0.01-25
C852	87-012-286-080		CAP, U 0.01-25
C853	87-012-286-080		CAP, U 0.01-25
C858	87-010-831-080		C-CAP,U,0.1-16F
C901	87-018-145-080		CAP,TC-U 6.8P-50 K CH UP050
C904	87-012-286-080		C-CAP,U 0.01-25 K B
C905	87-012-286-080		C-CAP,U 0.01-25 K B
C907	87-012-286-080		C-CAP,U 0.01-25 K B
C908	87-A10-915-080		C-CAP,U 1000P-25 J CH
C909	87-012-286-080		C-CAP,U 0.01-25 K B
C910	87-012-174-080		C-CAP,U 12P-50 J CH
C911	87-012-170-080		C-CAP,U 8P-50 D CH
C912	87-012-195-080		C-CAP,U 100P-50 J CH
C913	87-012-286-080		C-CAP,U 0.01-25 K B
C914	87-012-166-080		C-CAP,U 4P-50 C CH
C915	87-012-174-080		C-CAP,U 12P-50 J CH
C916	87-012-180-080		C-CAP,U 22P-50 J CH
C917	87-012-186-080		C-CAP,U 39P-50 J CH
C918	87-A10-039-080		C-CAP,U 470P-50 J CH
C921	87-012-195-080		C-CAP,U 100P-50 J CH
C922	87-012-174-080		C-CAP,U 12P-50 J CH
C940	87-012-286-080		CAP,U 0.01-25 K B
C941	87-012-180-080		C-CAP,U 22P-50 J CH
C943	87-012-286-080		C-CAP,U 0.01-25 K B
C945	87-012-286-080		C-CAP,U 0.01-25 K B
C946	87-010-971-080		C-CAP,S 4700P-50 J B
C947	87-012-286-080		C-CAP,U 0.01-25 K B
C948	87-012-166-080		C-CAP,U 4P-50 C CH
C952	87-012-286-080		CAP, U 0.01-25 K B
C953	87-012-286-080		C-CAP,U 0.1-25 K B
C954	87-A12-086-080		CAP,E 0.47-50 SMG
C956	87-A12-062-080		CAP,E 100-10 SMG
C959	87-010-831-080		C-CAP,U,0.1-16F
C962	87-A12-087-080		CAP,E 1-50 SMG
C963	87-015-785-080		C-CAP,0.1-25 Z F C3216
C964	87-010-854-080		C-CAP,S 560P-50 J CH
C971	87-A12-067-080		CAP,E 330-16 SMG
C972	87-A12-090-080		CAP,E 4.7-50 SMG
C973	87-012-286-080		CAP, U 0.01-25
C974	87-012-286-080		CAP, U 0.01-25
C979	87-012-195-080		C-CAP,U 100P-50CH
C981	87-A12-071-080		CAP,E 47-25 SMG
C982	87-010-831-080		C-CAP,U,0.1-16F
C983	87-012-286-080		CAP, U 0.01-25
C984	87-012-286-080		CAP, U 0.01-25
C987	87-012-286-080		CAP,U 0.01-25
C989	87-012-286-080		C-CAP,U 0.01-25 K B
C991	87-012-176-080		CAP 15P
C992	87-012-176-080		CAP 15P
C993	87-012-274-080		CHIP CAP,U 1000P-50B
C995	87-012-274-080		CHIP CAP,U 1000P-50B
C997	87-010-831-080		C-CAP,U,0.1-16F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C998	87-A12-071-080		CAP,E 47-25 SMG
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FLTR,CF SFE10.7MA5
CF832	87-008-261-010		FLTR,CF SFE10.7MA5
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN501	87-099-564-010		CONN,4P V TCU-P4P-B1
CN601	87-099-750-010		CONN,15P V 9604SC
CN604	87-A60-059-010		CONN,8P V 9604S-08C
CN605	87-A61-108-010		CONN,5P V TID-A
CN607	87-099-017-010		CONN, 15P V BLK 6216
D902	87-A40-128-080		C-VARI-CAP,HVU202A
D903	87-A40-128-080		C-VARI-CAP,HVU202A
D951	87-A40-618-080		VARI-CAP,SVC 348(S/T)
FB600	87-A92-284-010		F-BEAD,E3407MFT2
FB601	87-008-372-080		FLTR,EMI BL01 RN1
FFC602	88-908-401-110		FF-CABLE,8P 1.25 400MM
J203	87-A60-238-010		TERMINAL,SP 4P (MSC)
J204	87-A61-487-010		JACK,PIN 4P RBWB TC58 118-06
J602	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
J940	87-A60-366-010		CONN,2P H 2.5MM JMT
JR123	87-A10-596-080		C-CAP,S 100P-100 J CH
JR124	87-A10-596-080		C-CAP,S 100P-100 J CH
L201	87-A50-610-010		COIL,1UH K(MDEC)
L202	87-A50-610-010		COIL,1UH K(MDEC)
L451	87-007-342-010		COIL,OSC 85KHZ BIAS
L801	87-A50-608-010		COIL,FM DET-N(TOK)
L802	87-A91-552-010		FLTR,CFMT-450AL(TOK)
L811	87-005-847-080		COIL,2.2UH K CECS
L832	87-005-847-080		COIL,2.2UH K CECS
L902	88-ZA1-602-110		COIL,FM-RF-U2 2G
L903	88-ZA1-601-010		COIL,FM-RF-U1 2G
L904	87-005-847-080		COIL,2.2UH K CECS)
L905	88-ZA1-624-010		COIL,FM IFT 7-6.2(COILS)
L906	88-ZA1-603-010		COIL,FM-OSC-U 2G
L941	87-A50-022-010		COIL,ANT SW(COI)7.96MHZ
L942	87-A50-550-010		COIL,OSC SW-2N(COI)
L943	87-A50-522-080		COIL,1MH K CEC
L944	87-A50-159-010		COIL,10MH K C2B
L952	87-A50-430-010		COIL,ANT MW(3BSW)
L953	87-A50-431-010		COIL,OSC MW(3BSW)
R129	87-A00-262-080		RES,M/F 0.15-2W J
R130	87-A00-262-080		RES,M/F 0.15-2W J
R131	87-A00-262-080		RES,M/F 0.15-2W J
R132	87-A00-262-080		RES,M/F 0.15-2W J
R243	87-A01-002-050		RES,270-1/2W J BLT2J
R244	87-A01-002-050		RES,270-1/2W J BLT2J
R245	87-A01-002-050		RES,270-1/2W J BLT2J
R246	87-A01-002-050		RES,270-1/2W J BLT2J
R790	87-012-286-080		CAP, U 0.01-25
R991	87-012-195-080		C-CAP,U 100P-50CH
R993	87-012-195-080		C-CAP,U 100P-50CH
R995	87-012-195-080		C-CAP,U 100P-50CH
SFR451	87-A90-432-080		SFR,30K H NVZ6TLTA
SFR452	87-A90-432-080		SFR,30K H NVZ6TLTA
TC941	87-A91-773-080		TRIMMER,PLY 20P 6.8X5.4 CDYL
TC943	87-A91-774-080		TRIMMER,PLY 30P 6.8X5.4 CDYL
TH101	87-A91-042-080		C-THMS,100K 55001
TH102	87-A91-042-080		C-THMS,100K 55001
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P
W099	8B-NF8-652-010		CONN ASSY, 7P TID-A (300)
X992	87-A70-306-010		VIB,XTAL 4.500MHZ CSA-309ST

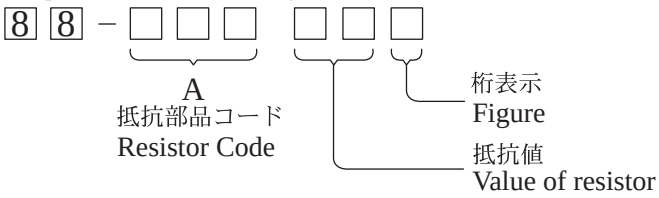
FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C141	87-012-278-080		C-CAP,U 2200P-50 B
C151	87-A11-242-040		CAP,E 220-10 M 5L SRM
C153	87-A10-781-080		C-CAP,U 0.15-10 K B
C154	87-010-785-080		C-CAP,U0.015-25BK
C155	87-012-176-080		CAP 15P
C156	87-012-195-080		C-CAP,U 100P-50CH
C157	87-012-198-080		CAP 180P
C165	87-012-268-080		C-CAP,U 330P-50 B
C166	87-010-075-040		CAP,E 10-16 5L
C170	87-010-759-080		C-CAP,U, 0.1-25F
C171	87-016-114-080		C-CAP,U0.01-25B
C175	87-010-759-080		C-CAP,U, 0.1-25F
C176	87-012-274-080		CHIP CAP,U 1000P-50B
C177	87-010-757-080		C.CAP,U 0.047-25F
C180	87-010-759-080		C-CAP,U, 0.1-25F
C193	87-012-271-080		CAP, U 560P-50
C194	87-012-195-080		C-CAP,U 100P-50CH
C315	87-010-759-080		C-CAP,U, 0.1-25F
C441	87-010-412-040		CAP,E 10-25 5L
C451	87-010-067-040		CAP,E 0.1-50 5L
C452	87-010-421-040		CAP,E 4.7-50 5L
C453	87-010-788-080		C-CAP,U 0.033-2.5F
C454	87-012-273-080		C-CAP,U 820P-50 B
C456	87-010-785-080		C-CAP,U0.015-25BK
C457	87-012-280-080		CAP, U 3300P-50
C459	87-A10-025-080		C-CAP,U, 0.22-16ZF
C460	87-010-831-080		C-CAP,U,0.1-16F
C551	87-010-759-080		C-CAP,U 0.1-25ZF
C552	87-010-401-040		CAP,E 1-50 M 11L SME
C621	87-010-075-040		CAP,E 10-16 5L
C622	87-010-759-080		C-CAP,U, 0.1-25F
C623	87-012-188-080		C-CAP,U 47P-50 CH
C624	87-012-188-080		C-CAP,U 47P-50 CH
C625	87-012-188-080		C-CAP,U 47P-50 CH
C679	87-010-759-080		C-CAP,U, 0.1-25F
C689	87-010-759-080		C-CAP,U, 0.1-25F
CN101	87-099-750-010		CONN,15P V 9604SC
CN102	87-099-017-010		CONN, 15P 6216
CN103	87-099-196-010		CONN,8P 6216
CN121	87-A60-061-010		CONN,6P V 9604S-06C
CN251	87-A60-059-010		CONN,8P V 9604S-08C
CN401	87-A60-062-010		CONN,5P V 9604S-05C
CN502	87-A60-061-010		CONN,6P V 9604S-06C
CNA141	87-009-030-010		CONN,2P V WHT PH
FB100	87-A92-284-010		F-BEAD,E3407MFT2
FFC101	88-915-151-110		FF-CABLE,15P 1.25 150MM
FFC102	8B-NF8-655-010		FF-CABLE,15P 1.25 150MM BLACK
FFC103	88-908-451-110		FF-CABLE,8P 1.25 450MM
FFC121	88-906-081-110		FF-CABLE,6P 1.25 80MM
FFC251	88-908-451-110		FF-CABLE,8P 1.25 450MM
FFC401	88-905-331-110		FF-CABLE,5P 1.25 330MM
FFC501	88-906-351-110		FF-CABLE,6P 1.25
L151	87-A50-657-010		COIL,CLK 9.43MHZ (TOKO)7KLY
LCD101	8B-NH8-601-010		LCD,AIW4276-30P1N
LED140	87-A40-317-080		LED,SLR-342VCT31 RED
LED671	87-A41-053-010		LED,SMLU18D16CGREEN/AMBER
LED681	87-A41-053-010		LED,SMLU18D16CGREEN/AMBER
R192	87-010-785-080		C-CAP,U0.015-25KB GRM
R193	87-010-785-080		C-CAP,U0.015-25KB GRM
R194	87-010-785-080		C-CAP,U0.015-25KB GRM
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S309	87-A90-095-080		SW,TACT EVQ11G04M
S310	87-A90-095-080		SW,TACT EVQ11G04M
S341	87-A90-095-080		SW,TACT EVQ11G04M
S342	87-A90-095-080		SW,TACT EVQ11G04M
S343	87-A90-095-080		SW,TACT EVQ11G04M
S344	87-A90-095-080		SW,TACT EVQ11G04M
S345	87-A90-095-080		SW,TACT EVQ11G04M
S346	87-A90-095-080		SW,TACT EVQ11G04M
S347	87-A90-095-080		SW,TACT EVQ11G04M
S348	87-A90-095-080		SW,TACT EVQ11G04M
S349	87-A90-095-080		SW,TACT EVQ11G04M
S350	87-A90-095-080		SW,TACT EVQ11G04M

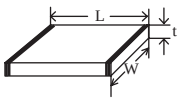
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW162	87-A91-645-010		SW,RTRY EC12E24304NON-CLICK
PT C.B			
CN1	87-A61-109-010		CONN,7P V TID-A
⚠ FB1	87-A90-457-010		F-BEAD 15-25-15E
⚠ PT1	8B-NH8-609-010		PT,BNH-8 HR
⚠ PT2	8B-MA6-673-010		PT,SUB BMA H(VRK)
⚠ RY1	87-A91-339-010		RELAY,AC DC12V G5PA-2
⚠ S1	87-A90-165-010		SW,SL 1-2-3 SWS2301
⚠ T1	87-A60-317-010		TERMINAL,1P MSC
⚠ T2	87-A60-317-010		TERMINAL,1P MSC
JACK C.B			
C223	87-010-176-080		C-CAP,S 680P-50 J SL
C224	87-010-176-080		C-CAP,S 680P-50 J SL
C241	87-010-759-080		C-CAP,U 0.1-25 Z F
CNA5	8B-NF8-653-010		CONN ASSY,5P TID-A (600)
J201	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW
R243	87-A01-001-050		RES,220-1/2W J BLT2J
R244	87-A01-001-050		RES,220-1/2W J BLT2J
R245	87-A01-001-050		RES,220-1/2W J BLT2J
R246	87-A01-001-050		RES,220-1/2W J BLT2J
WH2	87-A90-460-010		HLDR,WIRE 2.5-7P
TOP C.B			
C190	87-012-271-080		C-CAP,U 560P-50 K B
C191	87-012-195-080		C-CAP,U 100P-50 J CH
CN122	87-A60-154-010		CONN,6P H FE
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
SW163	87-A91-991-010		SW,RTRY REO12303PVB8H
MOT C.B			
CN402	87-A60-062-010		CONN,5P V 9604S-05C
M401	87-045-305-010		MOTOR, RF-500TB DC-5V(2MA)
S401	87-036-110-010		SW,MICRO SPPB62
S402	87-036-110-010		SW,MICRO SPPB62
MIC C.B			
C500	87-A11-144-080		CAP, TC U 0.1-50
C502	87-010-186-080		C-CAP,S 4700P-50 K B C2012
C503	87-010-112-040		CAP,E 100-16 M 11L SME
C504	87-010-498-040		CAP,E 10-16 M 5L SRE
C505	87-010-491-040		CAP,E 0.22-50 M 5L SRE
C506	87-010-320-080		C-CAP,S 68P-50 J CH GRM
C507	87-010-544-040		CAP,E 0.1-50 M 11L SME
C508	87-010-544-040		CAP,E 0.1-50 M 11L SME
C510	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C511	87-A12-065-040		CAP,E 33-16 SMG
C512	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C513	87-A50-322-080		C-COIL,S BK2125 LM252
C514	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C515	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C520	87-010-178-080		C-CAP,S 1000P-50 K B C2012
CN552	87-A60-061-010		CONN,6P V 9604S-06C
FB501	87-008-372-080		FILTER, EMI BL01 RN1
J501	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KM
VR501	87-NB7-602-010		VR,RTRY 10KAX1 1 V
KEY C.B			
CN141	8B-NF8-650-010		CONN ASSY,2P(45)
S321	87-A90-095-080		SW,TACT EVQ11G04M
S322	87-A90-095-080		SW,TACT EVQ11G04M
S323	87-A90-095-080		SW,TACT EVQ11G04M
S324	87-A90-095-080		SW,TACT EVQ11G04M
S325	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
DECK C.B			
CN1	87-A60-079-010		CONN,08P H 9604S-08F
M1	87-A91-825-010		MOT,M09Y/Z
SW1	87-036-110-010		SW,MICRO SPPB62
SW2	87-036-110-010		SW,MICRO SPPB62
SW3	87-036-110-010		SW,MICRO SPPB62
SW4	87-036-110-010		SW,MICRO SPPB62
SOL1	82-ZM3-628-010		SOL ASSY,23 SO
W1	8B-ZM1-604-010		RBN-CORD,2P-55MM
HEAD C.B			
CNA351	8B-NF8-654-010		CONN ASSY,8P(400)
FAN C.B			
C501	87-A12-087-080		CAP,E 1-50 SMG
C502	87-A12-090-080		CAP,E 47-25 SMG
C503	87-A12-071-080		CAP,E 47-25 SMG
CN502	87-A60-688-010		CONN,4P H GRY TUC-P04X-C1
CN503	87-A60-109-010		CONN,2P V S2M-2W
CN504	87-A60-109-010		CONN,2P V S2M-2W

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

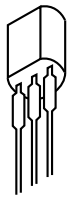
TRANSISTOR ILLUSTRATION

E C B

2SA1585SR

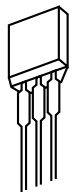
E C B

2SA1980G
2SA1981Y
STC250



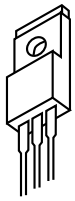
E C B

2N5551C(KEC)
KTC3198GR



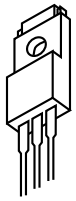
E C B

2SC4115SRS



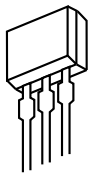
B C E

2SB1370E
FN1016
FP1016



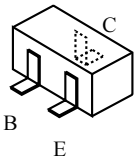
G D S

2SK2937



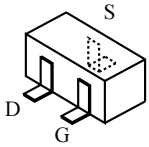
S D G

2SJ460
2SK2541

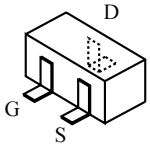


2SA1235F
2SB792A(RS)
2SC2714O
2SC3052F
2SD814A(RS)
CSD1306E

KRA102S
KRA104S
KRA107S
KRC102S-RTK
KRC104S
KRC107S



2SK360E



2SK2158

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B

J940 MW LOOP

J831 ANTENNA

SW

FM75Ω

FB600 TO CD MECHANISM BZG-5 (FFC602)

J602 VIDEO/AUX R L

J204 SUB WOOFERS R L

SURROUND SPEAKERS R L

J203 SPEAKERS SPEAKERS IMP:6Ω

TO PT C.B CN001 (W099)

TO HEAD C.B CNA351

TO FRONT C.B CN101 (FFC101)

CN102 (FFC102) TO FRONT C.B

(CNA005)

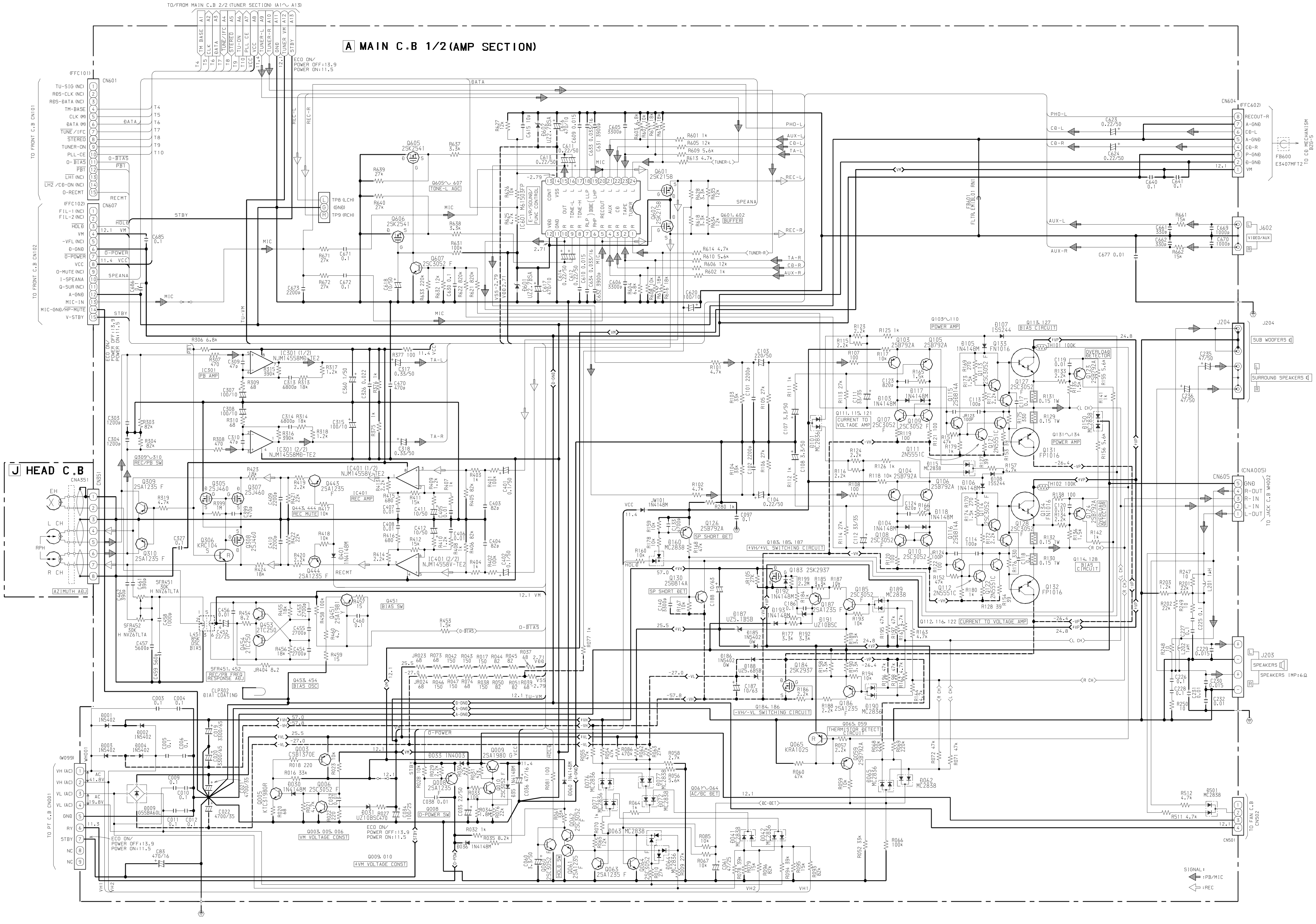
J201 PHONES

TO FAN

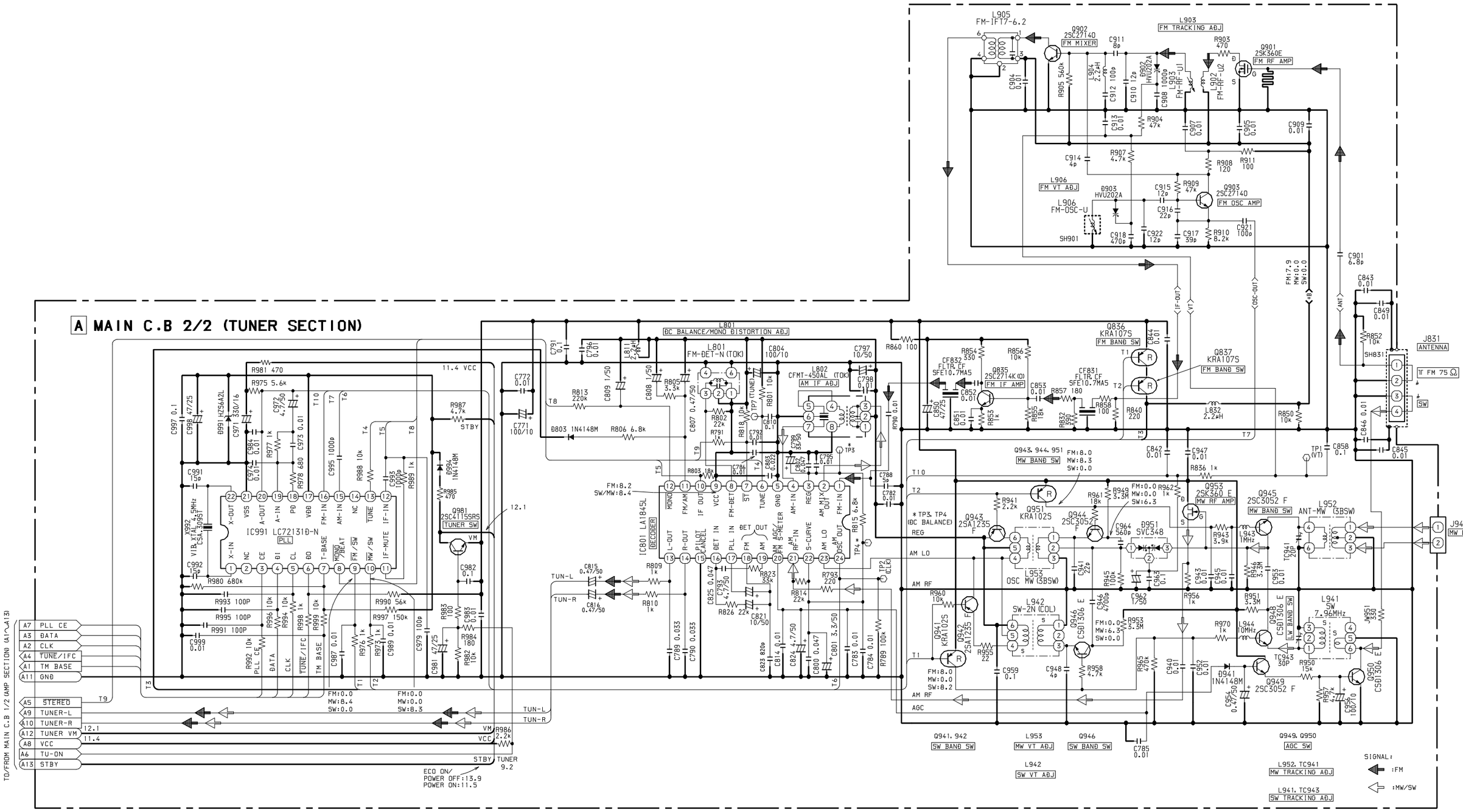
K FAN C.B

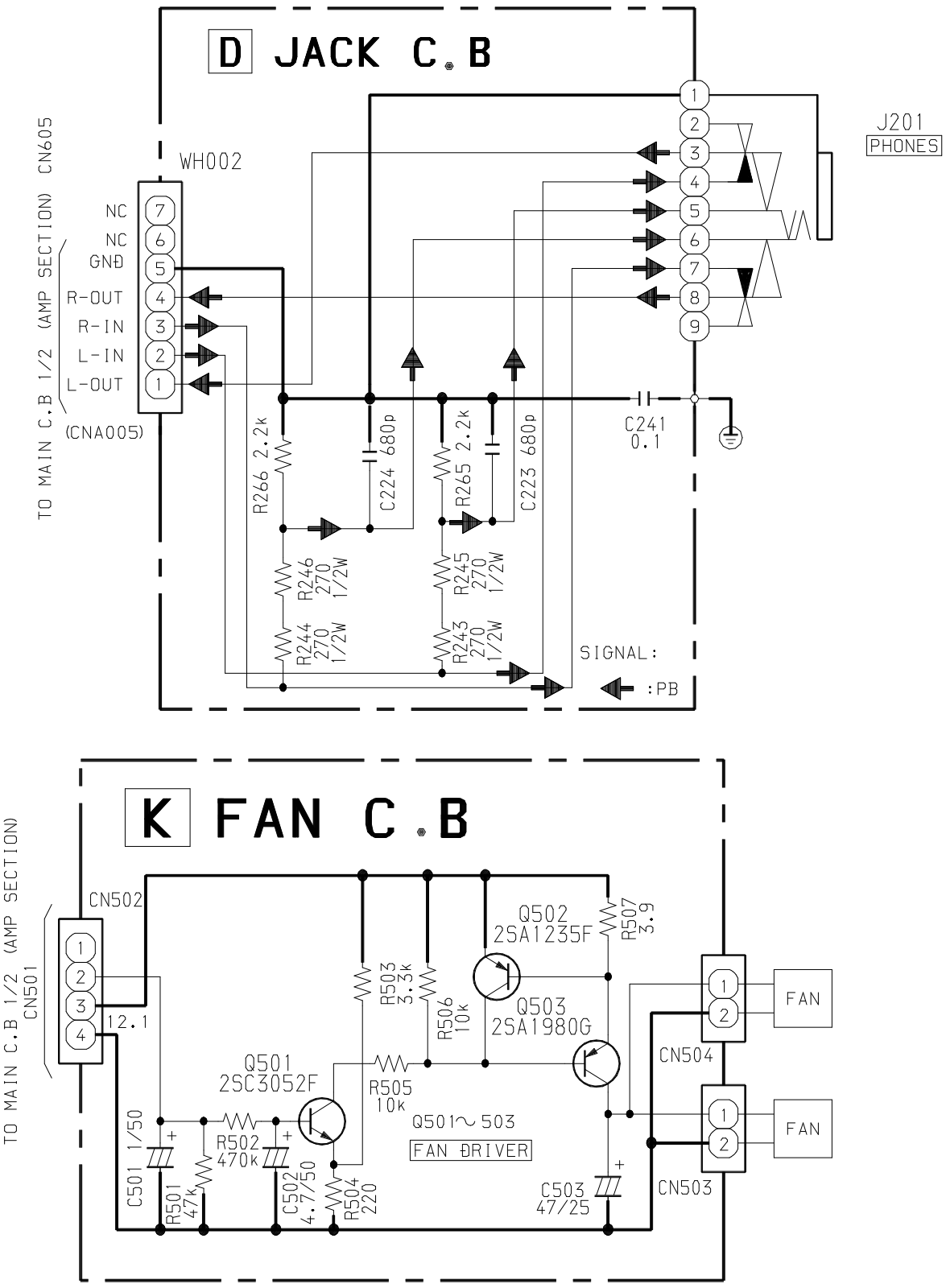
D JACK C.B

SCHEMATIC DIAGRAM – 1 (MAIN 1 / 2 : AMP SECTION / HEAD)

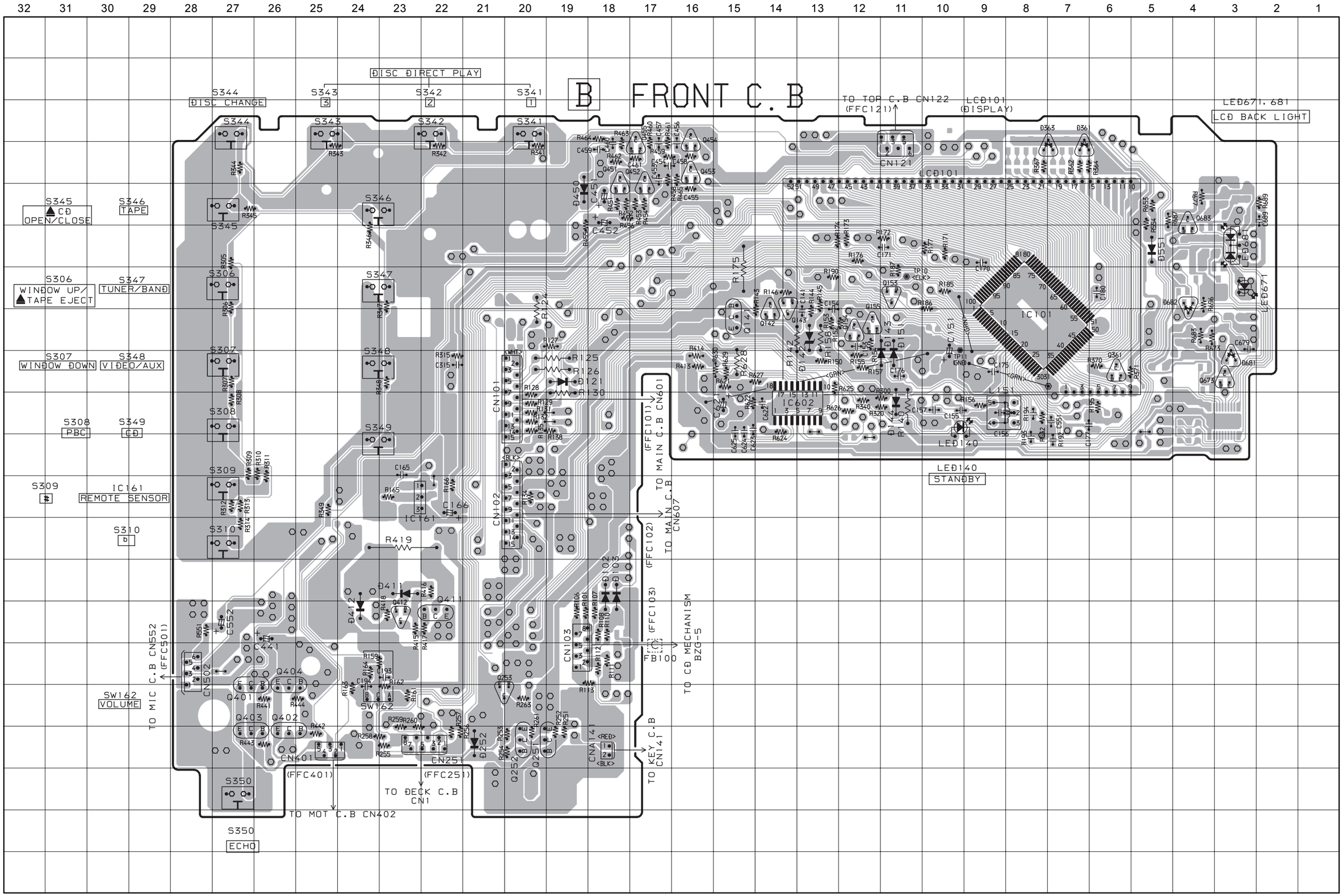

TO/FROM MAIN C.B 2/2 (TUNER SECTION) (A1～A13)
A MAIN C.B 1/2 (AMP SECTION)
J HEAD C.B
CN601
(FFC101)
TO FRONT C.B CN101
TU-SIG (NC)
RDS-CLK (NC)
RDS-DATA (NC)
TM-BASE
CLK (M)
DATA (M)
TUNE/IFC
STEREO
TUNER-ON
PLL-CE
O-BIAS
PB1
LH1 (NC)
LH2 /CD-ON (NC)
O-RECMT
CN607
(FFC102)
TO FRONT C.B CN102
FIL-1 (NC)
FIL-2 (NC)
HOLD
VM
-VFL (NC)
D-GND
O-POWER
VCC
O-MUTE (NC)
I-SPEANA
Q-SUR (NC)
A-GND
MIC-IN
MIC-GND/HP-MUTE
V-STBY
ECO ON/
POWER OFF:13.9
POWER ON:11.5
IC601 M61503FP
E-VR/SOUND/FUNC CONTROL
Q605～607 TONE-L AGC
Q601, 602 BUFFER
IC301 NJM14558MD-TE2
IC301 PB AMP
IC401 NJM14558V-TE2
IC401 REC AMP
Q305～310 REC/PB SW
Q443, 444 REC MUTE
Q451 BIAS SW
Q453, 454 BIAS OSC
SFR451, 452 REC/PB FREQ RESPONSE ADJ
AZIMUTH ADJ
CLP302 DIA1 COATING
CN604
(FFC602)
RECOUT-R
A-GND
CD-L
A-GND
CD-R
P-GND
D-GND
VM
FB600 E3407MFT2
TO CD MECHANISM BZG-5
J602 VIDEO/AUX
J204
SUB WOOFERS
SURROUND SPEAKERS
Q103～110 POWER AMP
Q113, 127 BIAS CIRCUIT
OVERLOAD DETECTOR
Q111, 115, 121 CURRENT TO VOLTAGE AMP
Q131～134 POWER AMP
Q114, 128 BIAS CIRCUIT
Q112, 116, 122 CURRENT TO VOLTAGE AMP
SP SHORT DET
Q183, 185, 187 +VH/+VL SWITCHING CIRCUIT
Q184, 186 -VH/-VL SWITCHING CIRCUIT
Q065, 059 THERMISTOR DETECT CIRCUIT
Q061～064 AC/DC DET
CN605
(CNA005)
GND
R-OUT
R-IN
L-IN
L-OUT
TO JACK C.B WH002
J203
SPEAKERS
SPEAKERS IMP:6Ω
CN501
TO FAN C.B CN502
WH001
(W099)
TO PT C.B CN001
VH (AC)
VL (AC)
GND
RY
STBY
NC
Q003, 005, 006 VM VOLTAGE CONST
Q008 O-POWER SW
Q009, 010 +VM VOLTAGE CONST
HOLD SW
SIGNAL:
:PB/MIC
:REC

SCHEMATIC DIAGRAM – 2 (MAIN 2/2 : TUNER SECTION)




D JACK C.B
J201
PHONES
WH002
NC
NC
GND
R-OUT
R-IN
L-IN
L-OUT
(CNA005)
TO MAIN C.B 1/2 (AMP SECTION) CN605
R266 2.2k
C224 680p
R265 2.2k
C223 680p
C241
0.1
R246
270
1/2W
R244
270
1/2W
R245
270
1/2W
R243
270
1/2W
SIGNAL:
:PB
K FAN C.B
TO MAIN C.B 1/2 (AMP SECTION)
CN501
CN502
12.1
Q502
2SA1235F
R507
3.9
R503
3.3k
R506
10k
Q503
2SA1980G
Q501
2SC3052F
R505
10k
Q501~503
FAN DRIVER
C501 1/50
R502
470k
R501
47k
C502
4.7/50
R504
220
C503
47/25
CN504
CN503
FAN
FAN

WIRING – 2 (FRONT) <1 / 2>

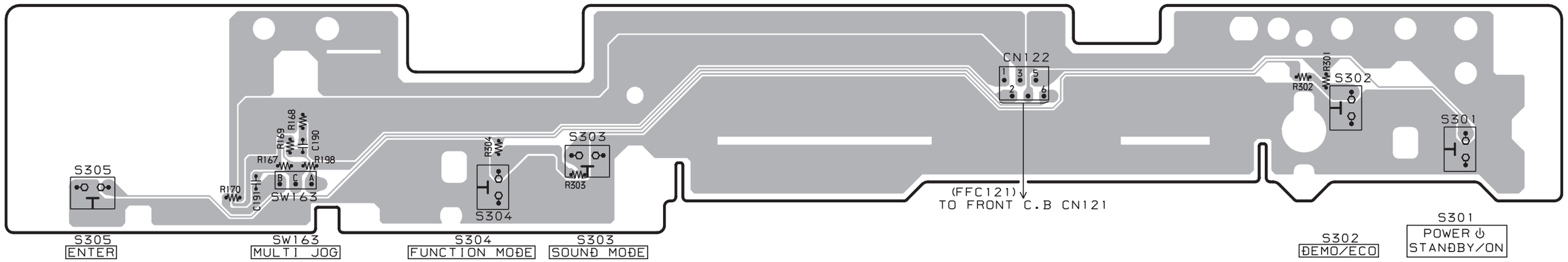


B FRONT C.B

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

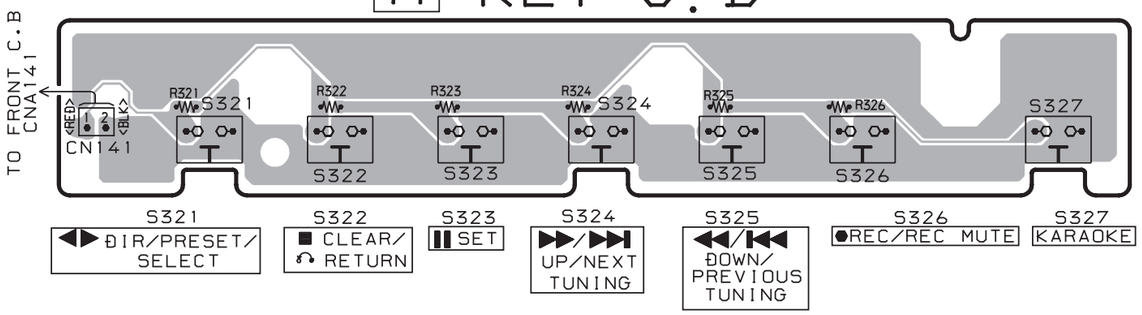
A B C D E F G H I J K L M N O P Q R S T U

E TOP C.B



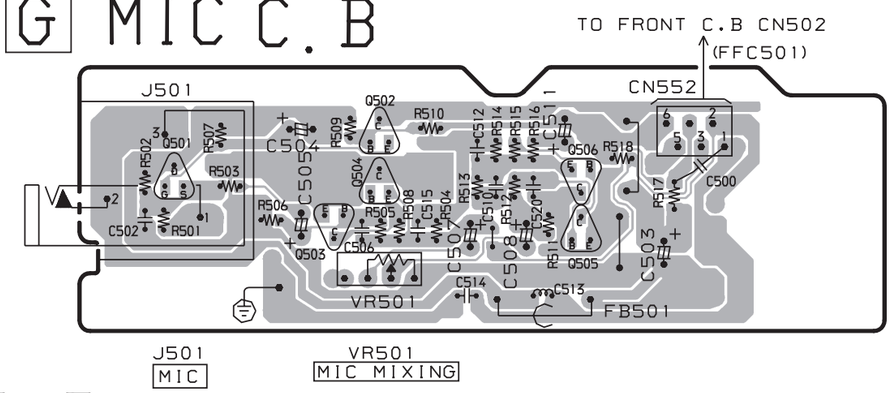
S305 ENTER | SW163 MULTI JOG | S304 FUNCTION MODE | S303 SOUND MODE | S302 DEMO/ECO | S301 POWER ⏻ STANDBY/ON

H KEY C.B



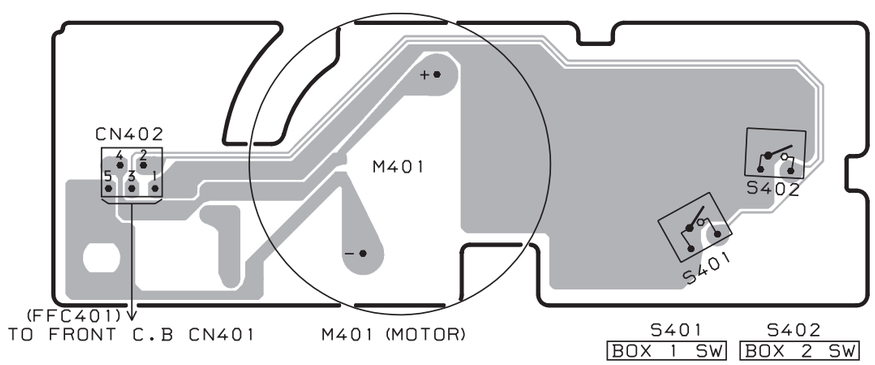
S321 ◀▶ DIR/PRESET/SELECT | S322 ■ CLEAR/↩ RETURN | S323 ❚❚ SET | S324 ▶▶/▶▶| UP/NEXT TUNING | S325 |◀◀/◀◀ DOWN/PREVIOUS TUNING | S326 ●REC/REC MUTE | S327 KARAOKE

G MIC C.B



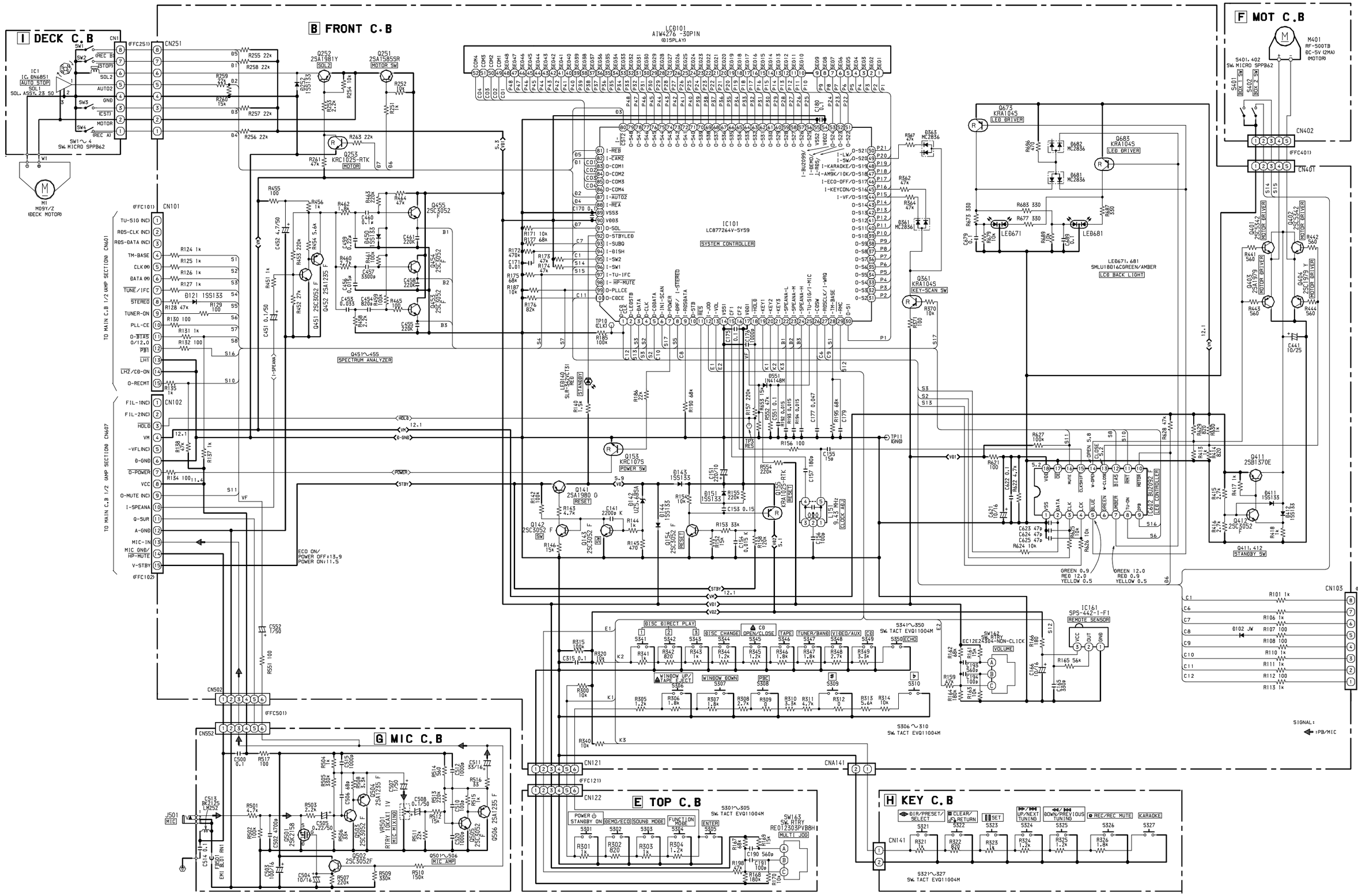
J501 MIC | VR501 MIC MIXING

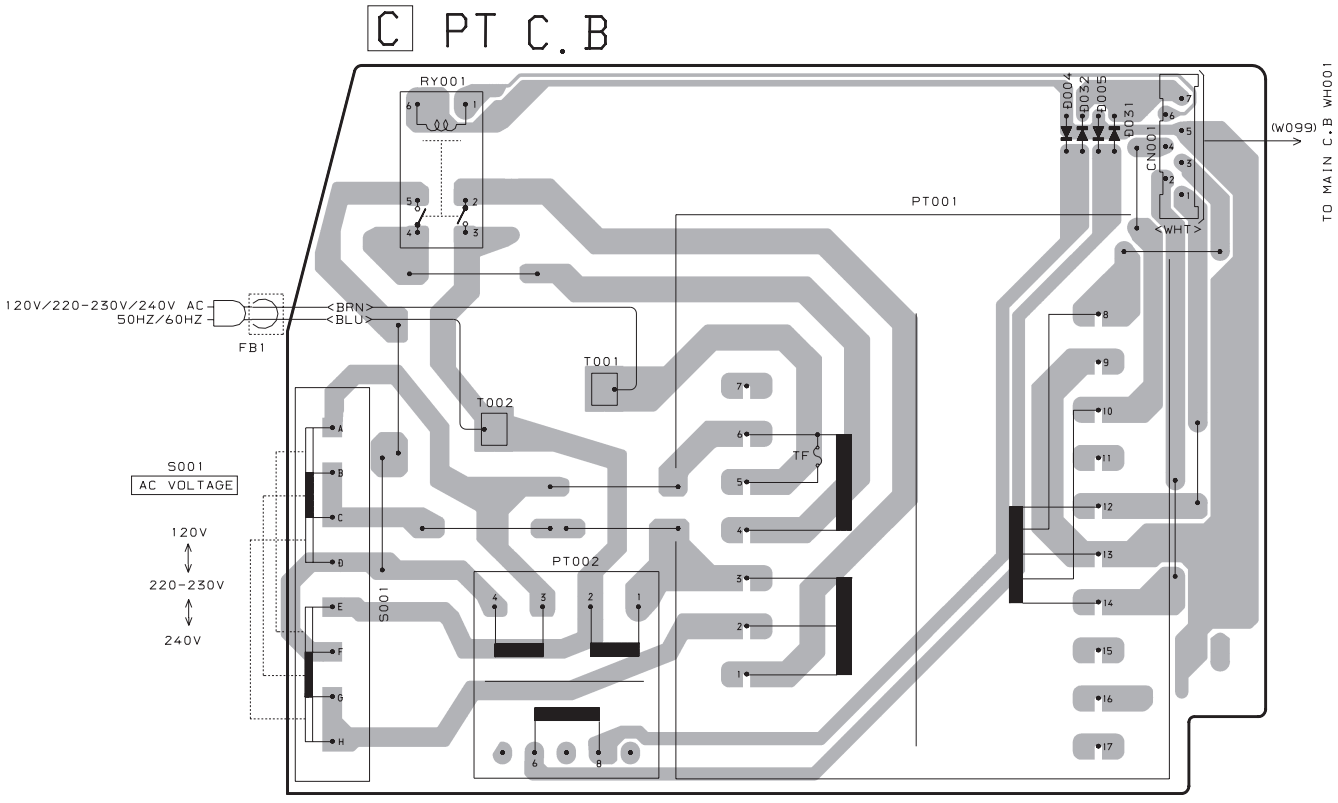
F MOT C.B

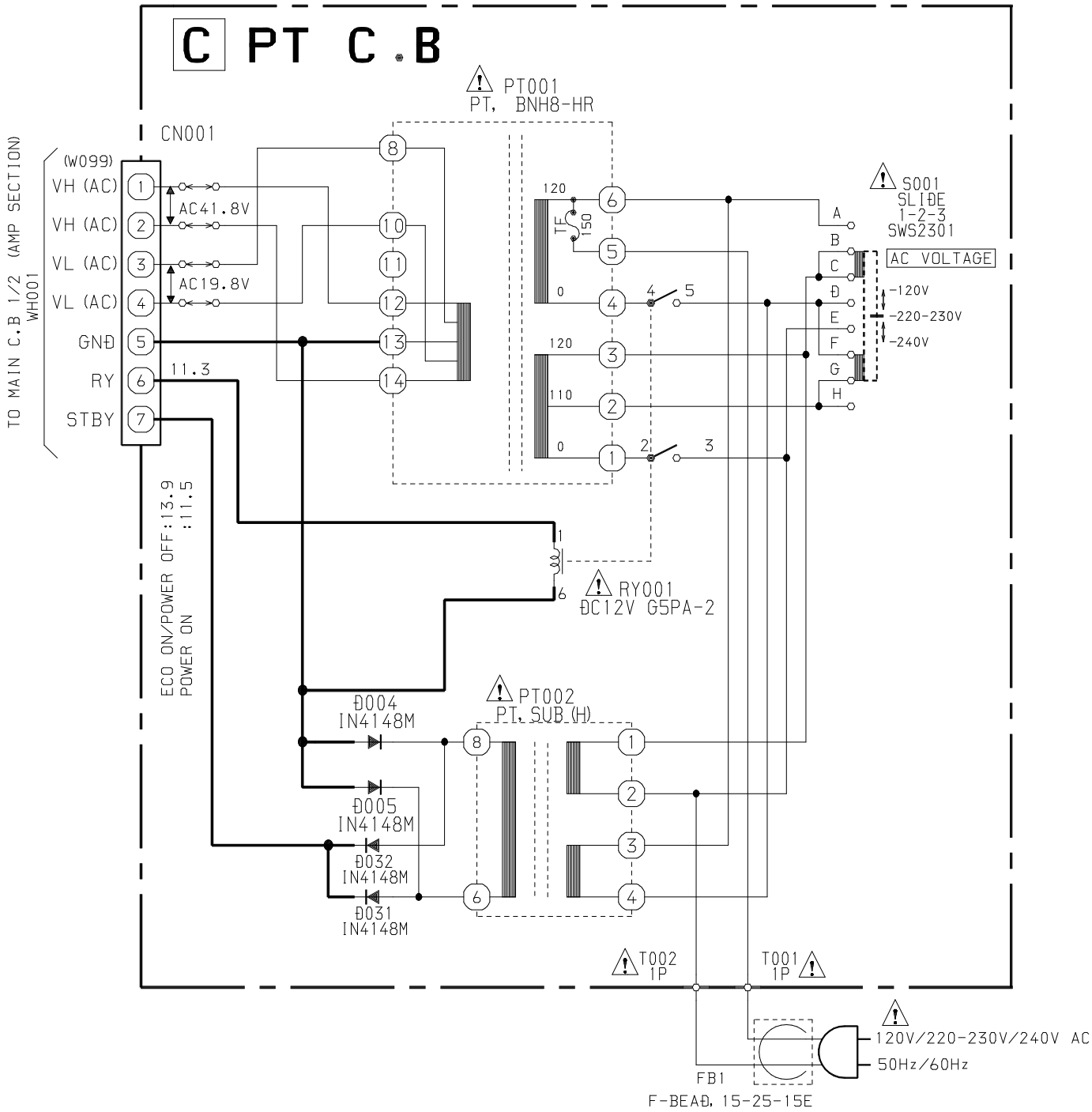


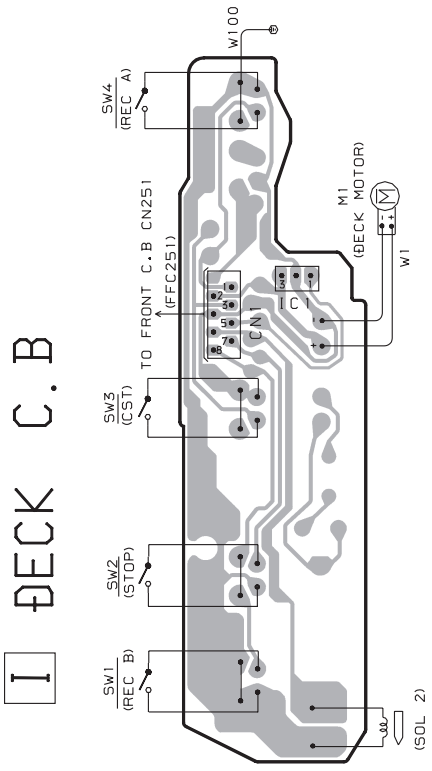
S401 BOX 1 SW | S402 BOX 2 SW

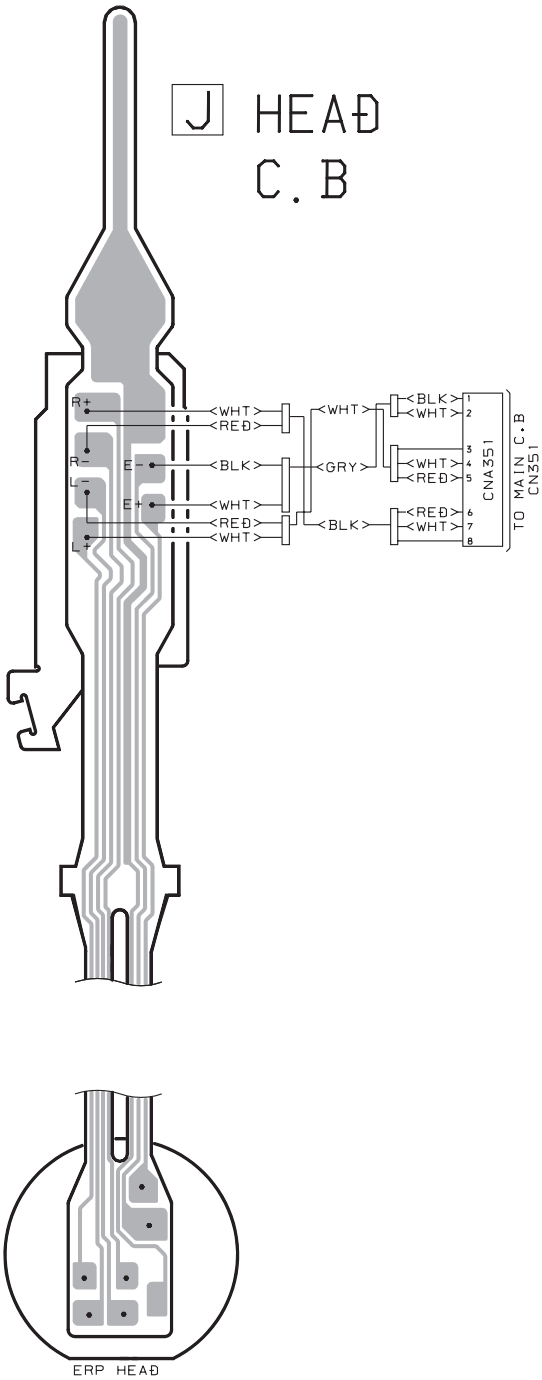
SCHEMATIC DIAGRAM – 4 (FRONT / TOP / MOT / MIC / KEY / DECK)




C PT C.B
RY001
BD04
BD032
BD05
BD031
CN001
(W099)
TO MAIN C.B WH001
PT001
<WHT>
120V/220-230V/240V AC
50HZ/60HZ
<BRN>
<BLU>
FB1
T001
T002
TF
S001
AC VOLTAGE
120V
220-230V
240V
PT002
S001

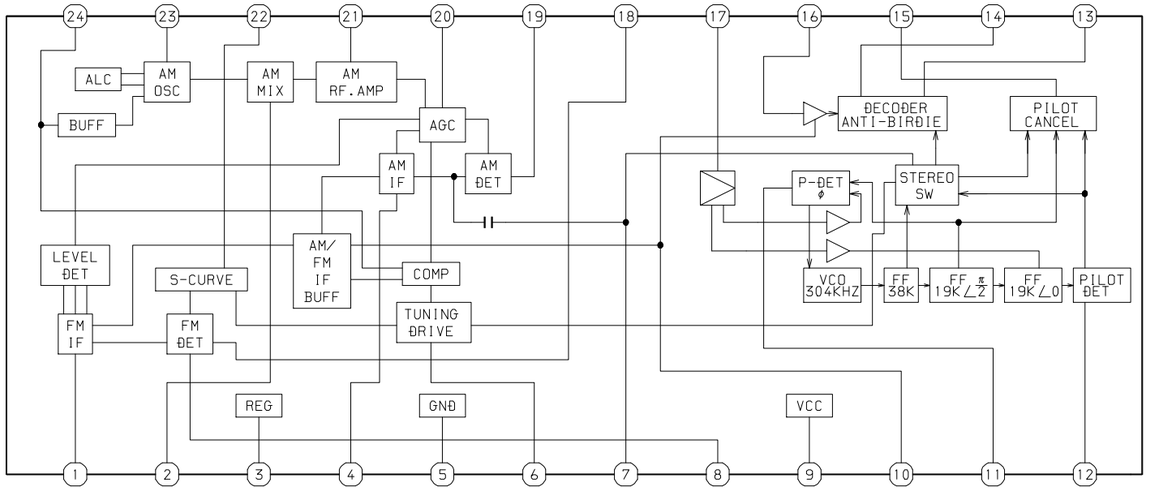

C PT C.B
PT001
PT, BNH8-HR
CN001
(W099)
TO MAIN C.B 1/2 (AMP SECTION)
WH001
VH (AC)
VH (AC)
VL (AC)
VL (AC)
GNĐ
RY
STBY
AC41.8V
AC19.8V
11.3
ECO ON/POWER OFF:13.9
:11.5
POWER ON
120
TF
150
0
120
110
0
S001
SLIĐE
1-2-3
SWS2301
AC VOLTAGE
-120V
-220-230V
-240V
RY001
ĐC12V G5PA-2
PT002
PT, SUB (H)
Đ004
IN4148M
Đ005
IN4148M
Đ032
IN4148M
Đ031
IN4148M
T002
1P
T001
1P
120V/220-230V/240V AC
50Hz/60Hz
FB1
F-BEAĐ, 15-25-15E


I DECK C.B
W100
SW4 (REC A)
SW3 (CST)
SW2 (STOP)
SW1 (REC B)
TO FRONT C.B CN251 (FFC251)
CN1
IC1
M1 (DECK MOTOR)
W1
(SOL 2)

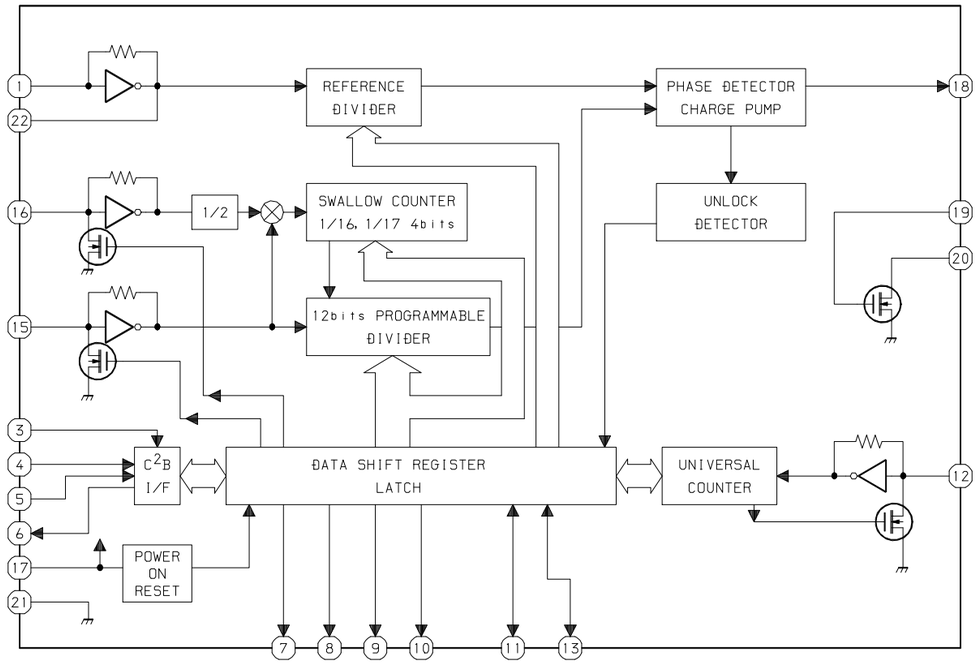

J HEAD C.B
WHT
RED
BLK
WHT
GRY
WHT
RED
BLK
WHT
RED
WHT
BLK
WHT
RED
WHT
RED
BLK
CNA351
TO MAIN C.B CN351
ERP HEAD

IC BLOCK DIAGRAM

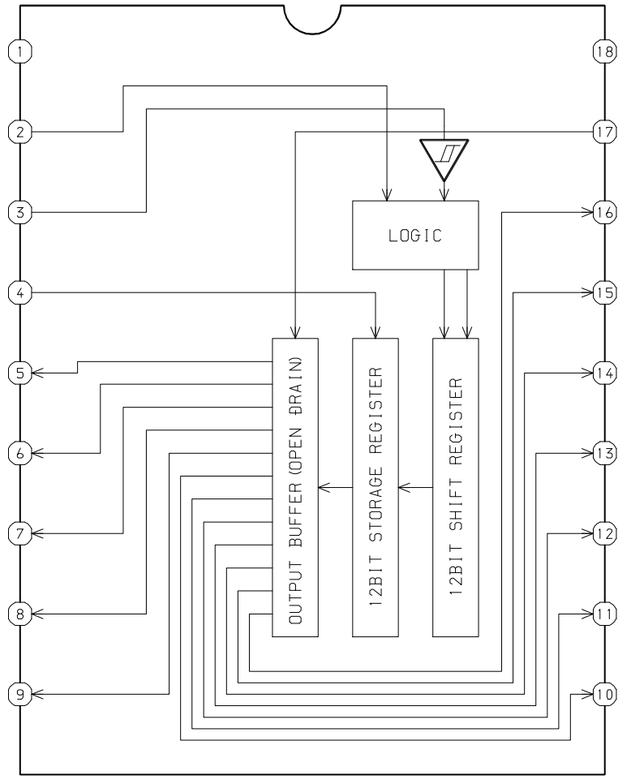
IC, LA1845L



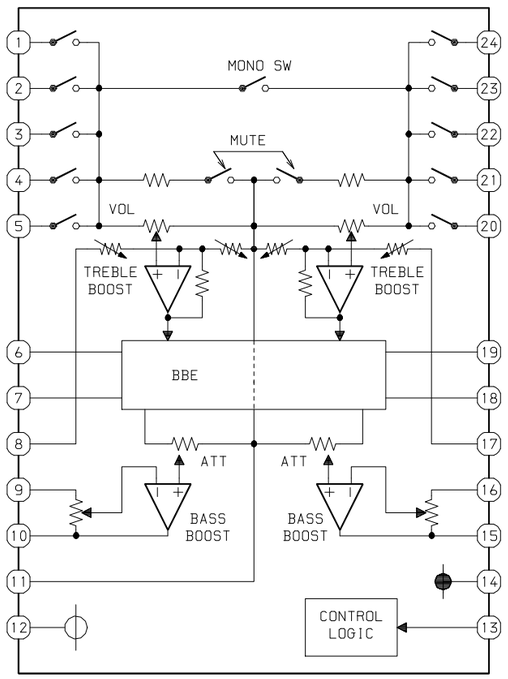
IC, LC72131Đ-N



IC, BU2092F

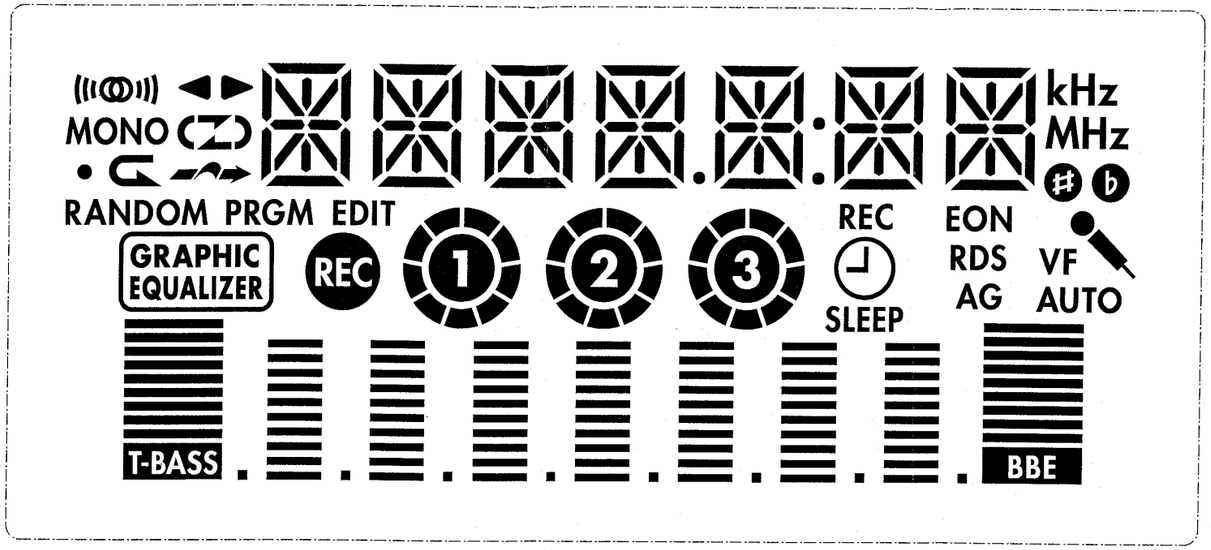


IC, M61503FP

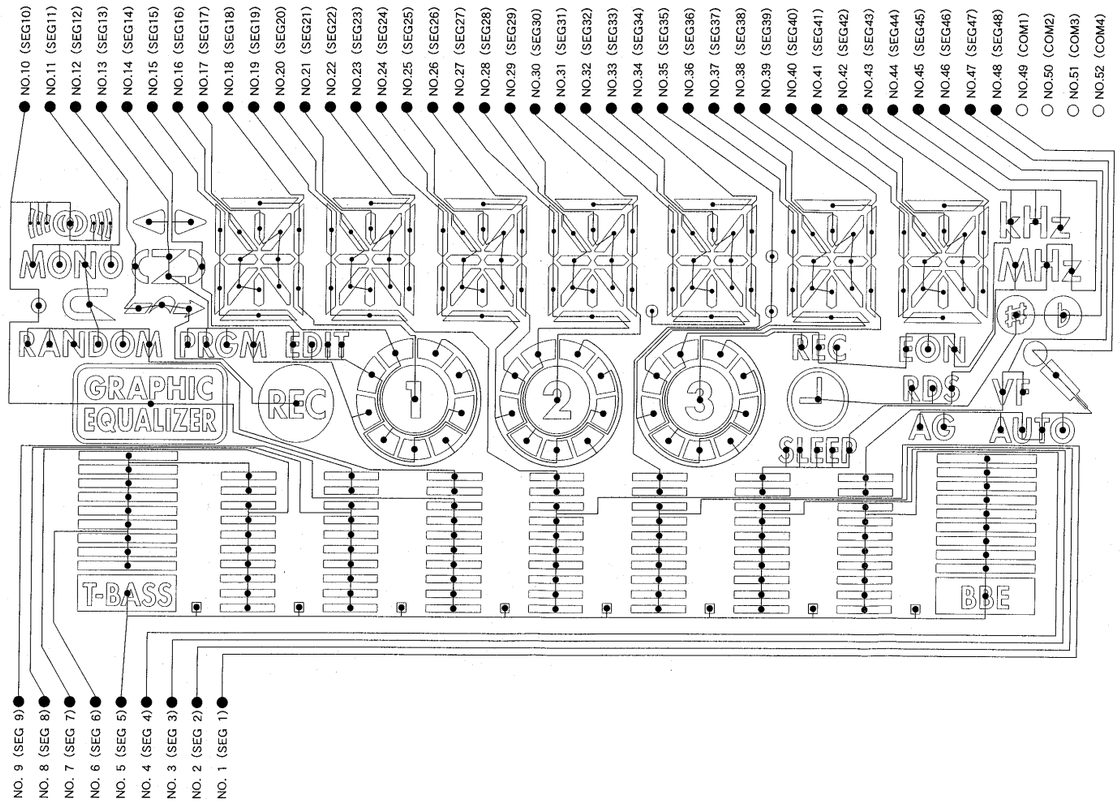


LCD DISPLAY

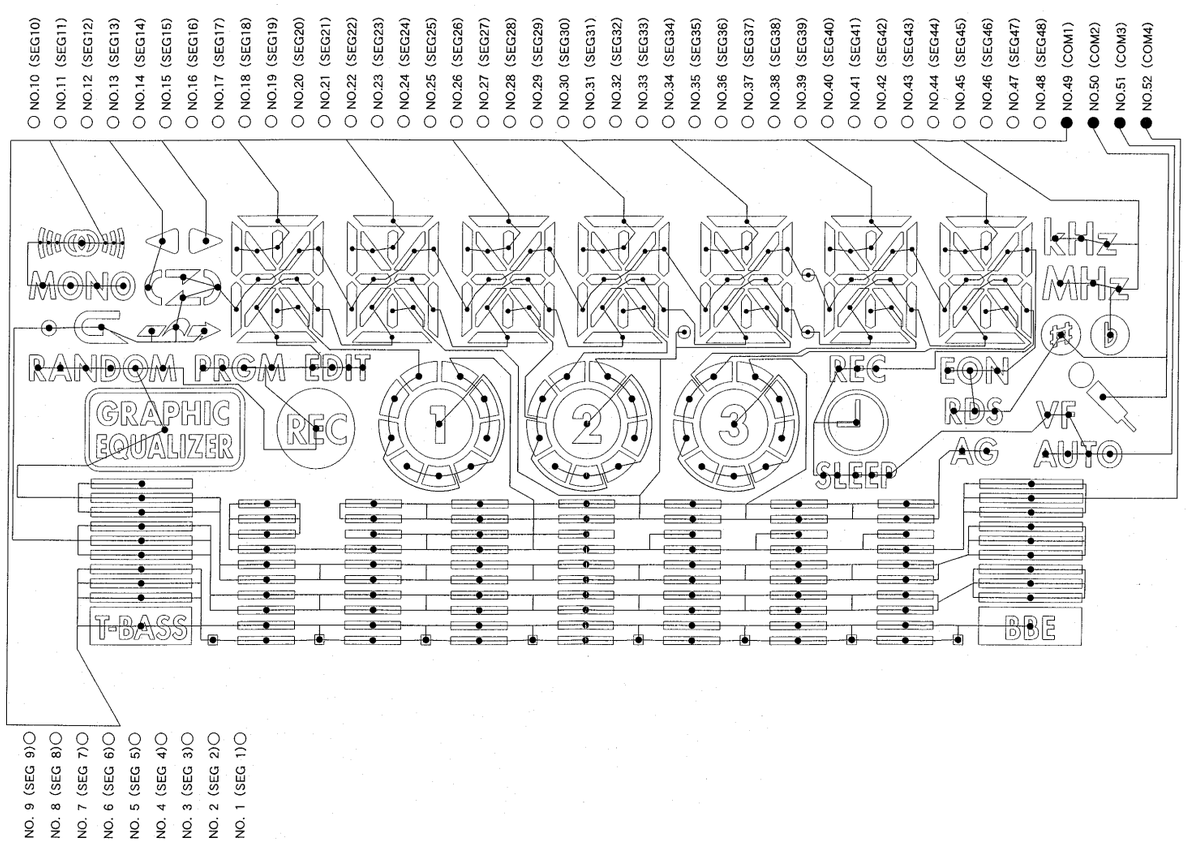
LCD, AIW4276 - 30PIN



SEGMENT WIRING



COMMON WIRING



IC DESCRIPTION

IC, LC877264V-5Y59

Pin No.	Pin Name	I/O	Description
1	O-CD CLK	O	CD IC control clock output.
2	O-LEDSTB	O	STB signal make clock and data effective.
3	O-DATA	O	Data output.
4	O-CLK	O	Clock output.
5	O-CDDATA	O	CD IC control data output.
6	O-INI-SCAN	O	Initial scan output.
7	O-POWER	O	Power control ON/$\overline{\text{OFF}}$ output.
8	I-DRF/I-$\overline{\text{STEREO}}$	I	RF (radio frequency) detect/Tuner stereo detect input.
9	I-RDSDATA	I	RDS IC data input. (Not used)
10	O-STB	—	Not used.
11	$\overline{\text{RES}}$	I	Reset input for MICON.
12	I-JOG	I	Dial jog rotary encoder input.
13	I-VOL	I	Volume rotary encoder input.
14	VSS1	—	Connected to ground.
15	CF1	I	Oscillator circuit input.
16	CF2	O	Oscillator circuit output.
17	VDD1	—	Digital power supply pin.
18	I-$\overline{\text{HOLD}}$	I	Power failure detected input.
19	I-KEY1	I	Key A/D input 1.
20	I-KEY2	I	Key A/D input 2.
21	I-KEY3	I	Key A/D input 3.
22	I-SPEANA-L	I	Spectrum analyser BPF switching control L input.
23	I-SPEANA-M	I	Spectrum analyser BPF switching control M input.
24	I-SPEANA-H	I	Spectrum analyser BPF switching control H input.
25	I-TU-SIG/I-MIC	I	Tuner signal input (not used)/MIC input.
26	I-CDSW	I	CD mecha switch input.
27	I-RDSCLK/I-WRQ	I	RDS IC clock input (not used)/CD WRQ input.
28	I-TM-BASE	I	Reference clock input for timer switch.
29	I-$\overline{\text{RMC}}$	I	System remote control signal input. "L" : ACTIVE.
30 ~ 43	O-S1 ~ O-S14	O	LCD segment S1 ~ S14 output.
44	I-VF/O-S15	I/O	VF select diode input/LCD segment S15 output.
45	I-KEYCON/O-S16	I/O	K-CON select diode input/LCD segment S16 output.
46	I-ECO-OFF/O-S17	I/O	ECO-OFF data input (not used)/LCD segment S17 output.
47	I-AM9$\overline{\text{K}}$/10K/O-S18	I/O	AM9K/10K select diode input (not used)/LCD segment S18 output.
48	I-KARAOKE/O-S19	I/O	Karaoke diode input (not used)/LCD segment S19 output.
49	I-SW/O-S20	I/O	SW diode input/LCD segment S20 output.
50	I-LW/O-S21	I/O	LW diode input (not used)/LCD segment S21 output.
51	I-RDS/O-S22	I/O	RDS input to diode (not used)/LCD segment S22 output.
52	I-DEMO/O-S23	I/O	Demo (on the stop) diode input (not used)/LCD segment S23 output.
53	I-BU2099/O-S24	I/O	Not used/LCD segment S24 output.
54	VDD2	—	Digital power supply pin.
55	VSS2	—	Connected to ground.

Pin No.	Pin Name	I/O	Description
56 ~ 79	O-S25 ~ O-S48	O	LCD segment S25 ~ S48 output.
80	I-$\overline{\text{CST2}}$	I	DECK cassette detection switch data input. "L" : ON.
81	I-$\overline{\text{REB}}$	I	DECK side B recordable switch. "L" : REC.
82	I-$\overline{\text{CAM2}}$	I	DECK CAM switch data input. "L" : ON.
83 ~ 86	O-COM1 ~ O-COM4	O	LCD driver common.
87	I-$\overline{\text{AUTO2}}$	I	DECK AUTO STOP switch data input.
88	I-$\overline{\text{REA}}$	I	DECK side A recordable switch. "L" : REC.
89	VSS3	—	Connected to ground.
90	VDD3	—	Digital power supply pin.
91	O-SOL	O	DECK solenoid output.
92	O-$\overline{\text{STBYLED}}$	O	Standby LED ON/OFF output. "L" : ON.
93	I-SUBQ	I	SUB-Q data input.
94	I-DISH	I	CD turnable photo sensor input.
95	I-SW2	I	Window position detection SW2.
96	I-SW1	I	Window position detection SW1.
97	I-TU-IFC	I	Tuner IF count input.
98	I-$\overline{\text{HP-MUTE}}$	I	Head phone jack detection. "L" : MUTE. (Not used)
99	O-PLLCE	O	Tuner PLL IC chip enable output.
100	O-CDCE	O	CD data chip enable output.

ADJUSTMENT <TUNER / DECK / FRONT >

< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to MW 1602 kHz and check that the test point is 2052 kHz ± 45 Hz.

2. MW VT Adjustment
   Settings: • Test point : TP1 (VT)
   • Adjustment location : L953
   Method : Set to MW 1710 kHz and adjust L953 so that the test point becomes 8.5 V ± 0.05 V.
   Then set to MW 530 kHz and check that the test point is more than 0.3 V.

3. SW VT Adjustment
   Settings: • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to SW 17.9 MHz and adjust L942 so that the test point becomes 8.0 V ± 0.05 V.
   Then set to SW 5.73 MHz and check that the test point is more than 0.3 V.

4. FM VT Adjustment
   Settings: • Test point : TP1 (VT)
   • Adjustment location : L906
   Method : Set to FM 108.0 MHz and adjust L906 so that the test point becomes 7.0 V ± 0.1 V.
   Then set to FM 87.5 MHz and check that the test point is more than 0.4 V.

5. MW Tracking Adjustment
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location :
   L952.....603 kHz
   TC941.....1404 kHz
   Method : Set up TC941 to center before adjustment. The level at 603 kHz is adjusted to maximum by L952. Then the level at 1404 kHz is adjusted to maximum by TC941.

6. SW Tracking Adjustment
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location :
   L941.....5.73 MHz
   TC943.....17.9 MHz
   Method : Set up TC943 to center before adjustment. The level at 5.73 MHz is adjusted to maximum by L941. Then the level at 17.9 MHz is adjusted to maximum by TC943.

7. FM Tracking Adjustment
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location : L903
   Method : Set to FM 87.5 MHz and adjust L903 so that the test point becomes less than 9.0 dBµV.

8. AM IF Adjustment
   Settings : • Test point : TP8 (Lch), TP9 (Rch)
   • Adjustment location :
   L802.....450 kHz

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   : TP8 (Lch), TP9 (Rch) (Mono Distortion)
   • Adjustment location : L801
   • Input level : 60 dBµV
   Method : Set to FM 98.0 MHz and adjust L801 so that the distortion is less than 1.2 % or minimum.
   Then check that the voltage between TP3 and TP4 is 0 V ± 500 mV.

< DECK SECTION >

1. Tape Speed Adjustment

Settings : • Test tape : TTA–100
• Test point : TP8 (Lch), TP9 (Rch)
• Adjustment location : SFR

Method : Play back the test tape and adjust SFR so that the frequency counter reads 3000 Hz ± 5 Hz (FWD) and ± 45Hz (REV) with respect to forward speed.

2. Head Azimuth Adjustment

Settings : • Test tape : TTA–330
• Test point : TP8 (Lch), TP9 (Rch)
• Adjustment location : Head azimuth adjustment screw

Method : Play back (FWD) the 8 kHz signal of the test tape and adjust screw so that the output at the test point becomes maximum. Next, perform on REV PLAY mode.

3. PB Frequency Response Check

Settings : • Test tape : TTA–330
• Test point : TP8 (Lch), TP9 (Rch)

Method : Play back the 315 Hz and 8 kHz signals of the test tape and check that the output ratio of the 8 kHz signal with respect to that of the 315 Hz signal is 0 dB ± 3 dB.

4. PB Sensitivity Check

Settings : • Test tape : TTA–200
• Test point : TP8 (Lch), TP9 (Rch)

Method : Play back the test tape and check that the output level of the test point is 110 mV ± 30 mV.

5. REC/PB Frequency Response Adjustment

Settings : • Test tape : TTA–602
• Test point : TP8 (Lch), TP9 (Rch)
• Adjustment location : SFR451 (Lch), SFR452 (Rch)
• Input signal : 8 kHz/1 kHz (LINE IN)(-20 VU)

Method : Apply a 1 kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 10 mV. Record and play back the 1 kHz and 8 kHz signal and adjust SFRs so that the output of the 8 kHz signals is 0 dB ± 1 dB with respect to that of the 1 kHz signal.

6. REC/PB Sensitivity Check

Settings : • Test tape : TTA–602
• Test point : TP8 (Lch), TP9 (Rch)
• Input signal : 1 kHz (LINE IN)(0 VU)

Method : Apply a 1 kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 100 mV. Record and play back the 1 kHz signal and check that the output is -1 dB ± 3.5 dB.

< FRONT SECTION >

1. Clock Adjustment

Settings : • Test point : TP10 (CLK), TP11 (GND)
• Adjustment location : L151

Method : Insert AC plug while pressing TUNER function key and POWER key. Adjust L151 so that the frequency at the test point is 97.28 Hz ± 0.10 Hz (10.269 ms ~ 10.290 ms).

CD TEST MODE

1. How to Start the CD Test Mode

While pressing the FUNCTION button, insert the AC plug to the power outlet.
When the test mode is started, the message [TEST] is displayed.

2. How to Exit the CD Test Mode

Press the POWER button or disconnect the AC plug.

3. Function Descriptions and Application of the CD Test Mode

No	Mode	Operation	Display	Function	Checking item
1	Start mode		All indicators light	• All FL indicators light	• FL check • Microprocessor check
2	Search mode	STOP button	CD	• LD illuminates all the time • Focus search continuous operations *1 • Spindle motor continuous kick	• APC circuit check • Laser current measurement • Focus search waveform check • Focus error waveform check (DRF in the search mode is ignored)
3	Play mode	Play button	Normal	• Normal playback • If TOC cannot be read, focus search is continued	• Each servo circuit is checked • DRF check
4	Traverse mode	PAUSE button	Normal	• Tracking servo OFF/ON • Each time PAUSE button is pressed, the tracking servo repeats turning OFF/ON	• Tracking balance check
5	Sled mode	FF button	TEST	• Pickup moves to the inner circumference *2 At the same time, lens kicks to the inner circumference	• Sled circuit check • Tracking circuit check • Mechanism operation check • Pickup check
		RWD button	TEST	• Pickup moves to the outer circumference *2 At the same time, lens kicks to the outer circumference	
6	Spindle mode	REC button	All indicators light	• The spindle motor rotates forward (rough speed) by pressing the button and rotates backward by pressing one more time and stops by pressing again	• Spindle circuit • Spindle motor
7	RF AGC mode	TUNER/ BAND button	AGC ON/OFF	• Each time the “TUNER” button is pressed, the AGC repeats ON/OFF	• PU good/faulty check • RF AMP circuit check

*1: The driver IC heats up and the protection circuit starts working when the focus search is continued for 10 minutes or longer. There can be a case that operations can not be performed correctly.
In such a case, turn off the main power. After cooling down the machine, restart the machine.

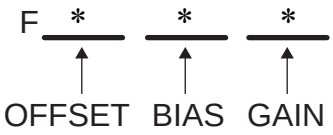
*2: Be careful not to damage the gear because the sled motor rotates while the FF or RWD button is being pressed even if the pick-up is located in the innermost track or the outermost track.

4. Displaying the Adjustment Result of the Automatic Adjustment Items

The automatic adjustment values of the focus and tracking adjustment can be displayed on the screen.

4-1. Displaying the automatic adjustment result for the focus offset cancel and gain

1. Select the “Start” mode. (All lights are turned on.)
2. Press the “TAPE” button until the display “F***” appears, and decide whether to display the automatic adjustment value or not.
   To display the automatic adjustment value, set “1”. If not, set “0”.

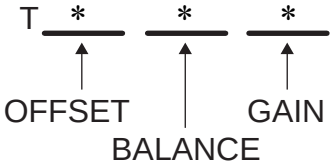


3. Press the “PLAY” button to play CD.
4. Press the “CD” button.
5. An automatic adjustment value is shown as “F******” on the display.
   (When “0” is selected for all items in step 2 of 4-1, no value is shown.)

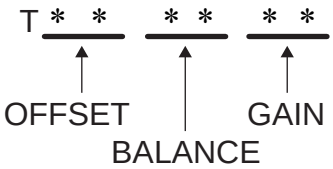
6. After the confirmation is completed, press “CD” twice button and the mode returns to the “PLAY” mode.

4-2. Displaying the automatic adjustment result of the tracking offset cancel, balance and gain

1. Select the “Start” mode. (All lights are turned on.)
2. Press the “VIDEO/AUX” button until the display “T***” is shown, and decide whether to display the automatic adjustment value or not.
   To display the automatic adjustment value, set “1”. If not, set “0”.



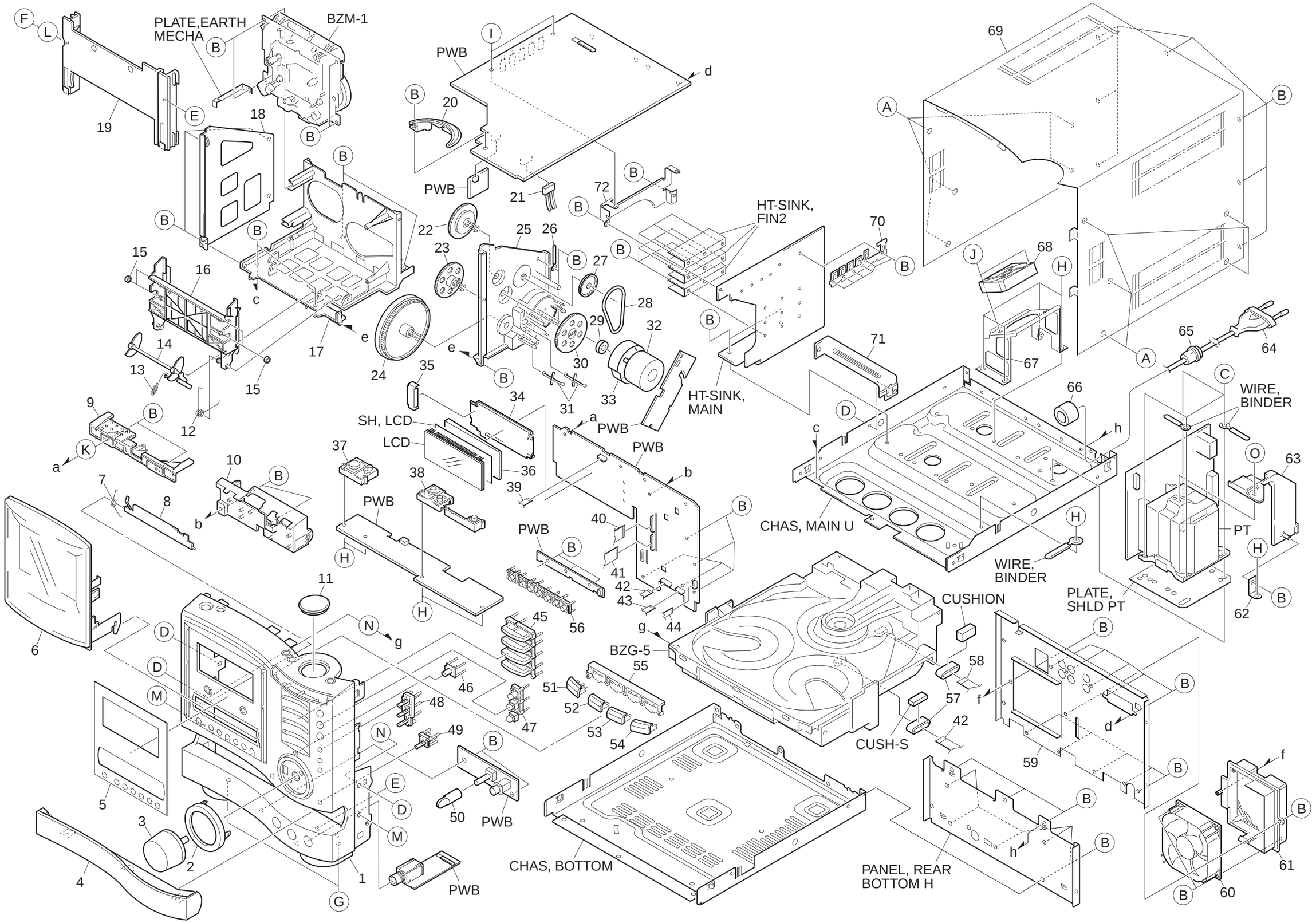
3. Press the “PLAY” button to play CD.
4. Press twice the “CD” button.
5. The automatic adjustment value is shown as “T******” on the display.
   (When “0” is selected for all items in step 2 of 4-1, no value is shown.)



6. After the confirmation is completed, press the “CD” button and the mode returns to “PLAY” mode.

Note: The automatic adjustment value can be shown but cannot be changed.

MECHANICAL EXPLODED VIEW 1 / 1



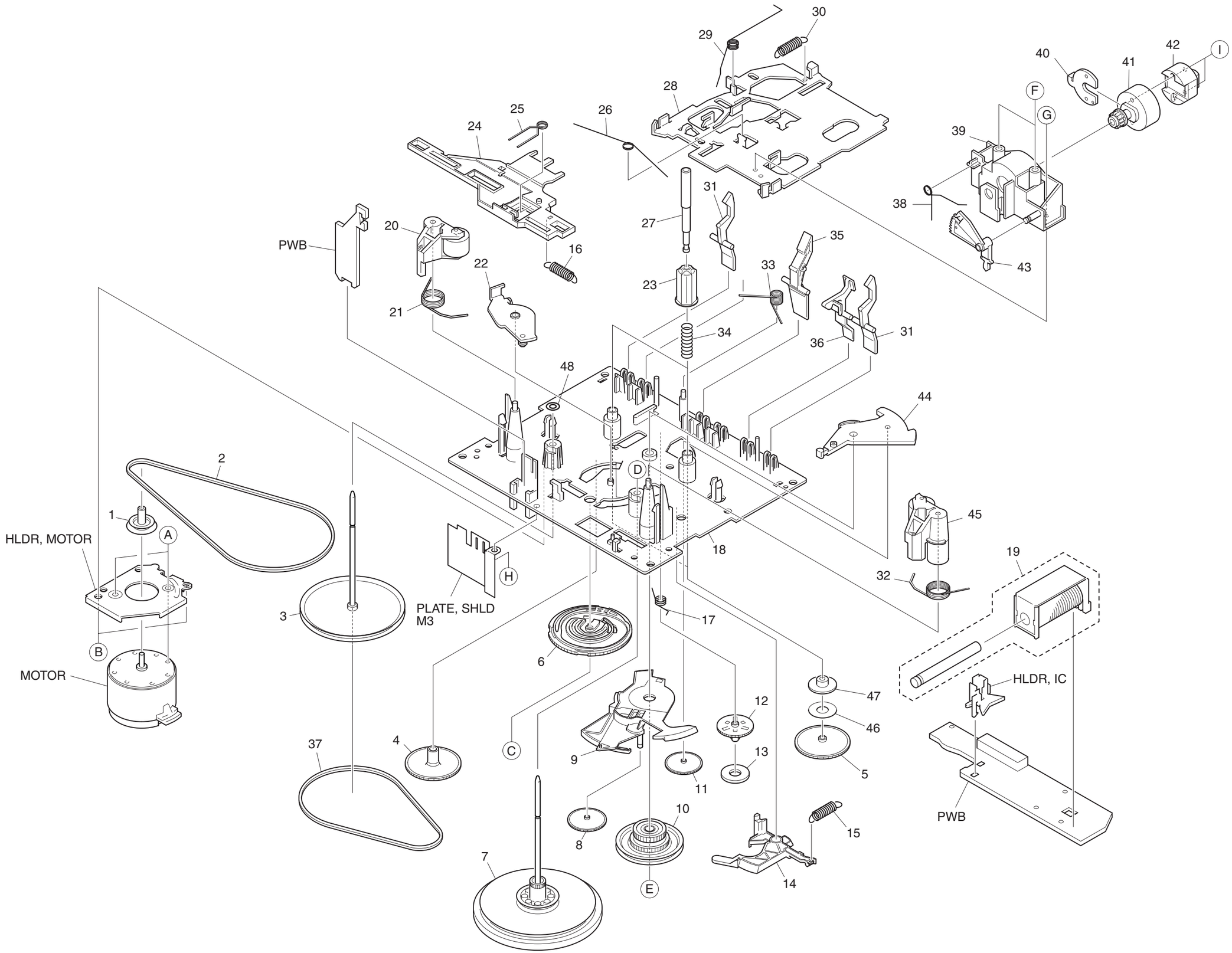
MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NH8-001-010		CABI,FR H
2	8B-NF8-027-010		RING,VOL U
3	8B-NF8-014-010		KNOB,RTRY VOL
4	8B-NH8-002-010		PANEL,TRAY VCD
5	8B-NH8-018-010		PLATE,DISP H V-CD
6	8B-NH8-016-010		WINDOW,ASSY BL GV30
7	8B-NF8-223-010		SPR-T,FLAP
8	8B-NF8-030-010		PANEL,FLAP
9	8B-NF8-206-110		HLDR,PWB L
10	8B-NF8-207-210		HLDR,PWB R
11	8B-NF8-015-010		KNOB,RTRY JOG
12	8B-NF8-222-010		SPR-T,CASS
13	8B-NF8-225-010		SPR-E,EJECT
14	8B-NF8-220-010		LEVER,EJECT
15	8B-NF8-224-010		ROLLER,CASS
16	8B-NF8-209-110		BOX ASSY,CASS
17	8B-NF8-216-210		HLDR,MECH BOTTOM
18	8B-NF8-218-210		HLDR,MECH LEFT
19	8B-NF8-219-010		HLDR,WINDOW
20	8B-NF8-012-010		PANEL,JOG
21	8B-NF8-654-010		CONN ASSY,8P (400)
22	8B-NF8-213-110		GEAR,RELAY WINDOW
23	8B-NF8-215-010		GEAR,WINDOW
24	8B-NF8-212-110		GEAR,CASS CAM
25	8B-NF8-217-010		HLDR,MECH RIGHT
26	87-064-185-010		HLDR,WIRE
27	84-ZG1-207-010		PULLEY,RELAY
28	84-ZG1-209-010		BELT,SQ1.8-117.7
29	84-ZG1-267-010		PULLEY,LOAD MO 8
30	8B-NF8-214-010		GEAR,RELAY
31	8B-NF8-221-010		LEVER,SW
32	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
33	8B-NF8-238-010		RING,SHLD MOT
34	8B-NF8-203-110		GUIDE,LCD
35	8B-NF8-204-010		COVER, LCD
36	8B-NF8-051-010		REFLECTOR,LCD
37	8B-NF8-016-010		KEY,POWER
38	8B-NF8-026-010		KEY,ENTER
39	88-906-081-110		FF-CABLE, 6P 1.25 80MM
40	88-915-151-110		FF-CABLE,15P 1.25 150MM
41	8B-NF8-655-010		FF-CABLE,15P 1.25 150MM BLACK
42	88-908-451-110		FF-CABLE,8P 1.25 450MM
43	88-905-331-110		FF-CABLE, 5P 1.25 330MM
44	88-906-351-110		FF-CABLE,6P 1.25
45	8B-NF8-041-110		KEY,FUNCTION
46	8B-NF8-029-010		LENS,SENSOR
47	8B-NF8-034-110		KEY,ASSY OPEN/CLOSE U
48	8B-NF8-035-010		KEY,RDS
49	8B-NF8-021-010		KEY,ECHO
50	8B-NF8-031-010		KNOB,RTRY MIC
51	8B-NF8-076-010		BTN,CD 1
52	8B-NF8-077-010		BTN,CD 2
53	8B-NF8-078-010		BTN,CD 3
54	8B-NF8-025-110		BTN,CD DISC CHANGE
55	8B-NF8-210-110		KEY,CD
56	8B-NF8-037-010		KEY,KARAOKE
57	87-A92-284-010		F-BEAD, E3407MFT2
58	88-908-401-110		FF-CABLE,8P 1.25 400
59	8B-NH8-009-010		PANEL,REAR HRJ
60	87-A91-751-010		FAN,DSB0812M-S382 -400MM
61	8B-NF8-227-010		HLDR,FAN
62	8B-NH8-205-010		HLDR,PWB PT SUB
63	8B-NF7-209-010		HLDR,PT(85-58)
⚠ 64	87-A80-157-010		AC CORD ASSY,E BLK CC
65	87-085-185-010		BUSHING, AC CORD (E)
66	87-A90-457-010		F-BEAD,15-25-15 E251
67	8B-NH8-208-010		HLDR,FAN 60
68	87-A90-796-010		FAN,F614R-12MC-15-300MM
69	8B-NH8-021-010		CABI,STEEL HR
70	8B-NF7-239-210		HLDR,TR U
71	8B-NH8-207-010		HLDR,JOINT
72	8B-NH8-202-010		HLDR,HT-SINK
A	87-067-641-010		UTT2+3-8(W/O SLOT)BL
B	87-067-703-010		TAPPING SCREW, BVT2+3-10
C	87-067-975-010		S-SCREW,IT+4-8
D	87-591-094-410		TAPPING SCREW, QIT+3-6
E	88-AR1-217-010		S-SCREW,BFT2+3-8
F	87-721-096-410		QT2+3-10 GLD
G	87-067-688-010		BVTT+3-6
H	87-067-579-010		TAPPING SCREW, BVT2+3-8
I	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
J	87-067-822-010		BVT2+3-20 W/O SLOT
K	87-067-058-010		FW 3.2-8-0.5
L	87-067-747-010		W,4.3-14-1
M	87-721-097-410		QT2+3-12 GLD
N	82-NE8-215-010		W 4.2-7-0.18
O	87-067-703-010		BVT2+3-10 W/O SLOT

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green	HT	Transparent Gray
HM	Metallic Gray	NH	Champagne Gold	M	Wood Pattern

TAPE MECHANISM EXPLODED VIEW 1 / 1



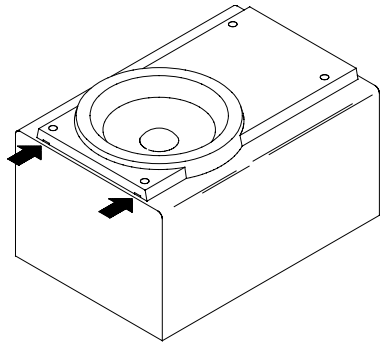
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-271-010		PULLEY,MOT ZZM-1
2	82-ZM1-354-010		BELT,SBU MAIN2 EPDM
3	82-ZM1-234-310		FLY-WHL ASSY,L
4	82-ZM1-226-010		GEAR,REW
5	82-ZM1-216-510		GEAR,REEL
6	82-ZM1-221-310		GEAR,CAM(*)
7	82-ZM1-237-610		FLY-WHL ASSY,R
8	82-ZM1-225-210		GEAR,FR
9	82-ZM1-224-410		LVR,FR
10	82-ZM3-333-310		SLIP DISK ASSY 2
11	82-ZM1-223-010		GEAR,PLAY
12	82-ZM1-220-210		GEAR,IDLER
13	82-ZM3-616-010		RING MAGNET 4
14	82-ZM1-227-310		LVR,TRIG
15	82-ZM1-305-210		SPR-E,TRIG 2
16	82-ZM1-255-310		SPR-E,LVR DIR
17	82-ZM1-322-010		SPR-T,FR 60
18	82-ZM1-358-110		CHAS ASSY,FPC
19	82-ZM3-628-010		SOL ASSY,23 SO
20	82-ZM1-363-010		LEVER,ASSY PINCH LD
21	82-ZM1-258-210		SPR-T,PINCH L
22	82-ZM1-333-210		PLATE,LINK2
23	86-ZM1-203-010		CAP.REEL
24	82-ZM1-266-310		LVR,DIR
25	82-ZM1-214-010		SPR-T,DIR
26	82-ZM1-269-210		SPR-T,BRG
27	86-ZM1-202-010		SHAFT,REEL
28	82-ZM1-206-910		CHAS,HEAD
29	82-ZM1-219-110		SPR-T,LINK
30	82-ZM1-218-010		SPR-E,HB
31	82-ZM1-240-110		LVR,REC(*)
32	82-ZM1-259-310		SPR-T,PINCH R
33	82-ZM1-257-010		SPR-T,CAS
34	86-ZM1-221-010		SPR-C,BT 2L
35	82-ZM1-242-010		LVR,CAS
36	82-ZM1-243-010		LVR,STOP
37	82-ZM1-338-110		BELT,FR 4
38	82-ZM3-353-010		SPR-T,HEAD 2
39	82-ZM1-207-910		GUIDE,TAPE
40	82-ZM1-314-110		PLATE,HEAD
41	82-ZM1-208-310		HLDR,HEAD
42	87-A91-195-110		HEAD,RPH KC9142 FPC
43	82-ZM1-210-110		GEAR,H T
44	82-ZM1-222-310		LVR,PLAY(*)
45	82-ZM1-362-010		LEVER,ASSY PINCH RD
46	86-ZM1-220-010		FELT,DIA 5.3-14-0.8
47	82-ZM1-219-010		CLR,REEL SLIP
48	82-ZM1-288-010		SH,1.63-3.2-0.5 SLT
A	87-251-070-410		U+2.6-3
B	87-741-073-410		UT2+2.6-6 GLD
C	87-B10-008-010		W-P,2.08-8-0.4-SLIP
D	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
E	82-ZM3-334-010		PW 2.16-6-0.4
F	86-ZM4-206-110		S-SCREW,AZIMUTH L
G	85-ZM3-202-010		S-SCREW,TG
H	82-ZM3-222-010		S-SCREW,SHILD PLATE
I	80-ZM6-207-010		V+1.6-7

GENERAL SPEAKER DISASSEMBLY INSTRUCTIONS (FOR REFERENCE)

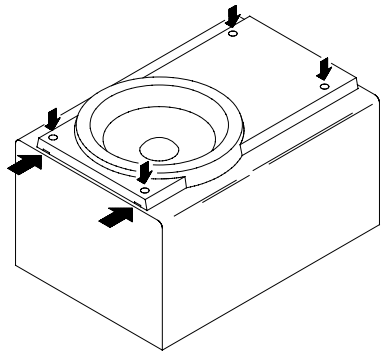
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



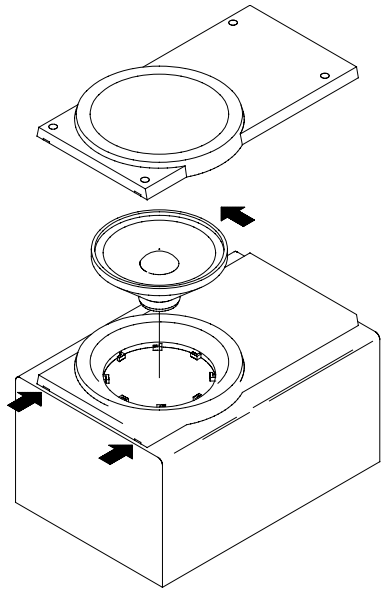
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

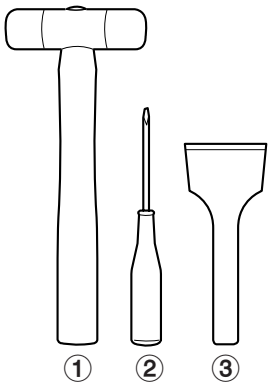


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

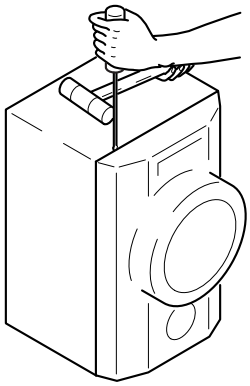


Fig-1

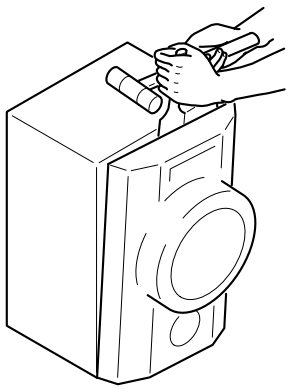


Fig-2

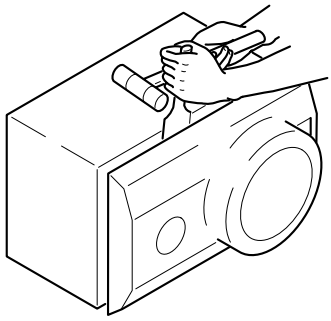


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST <SX – G3 (YJ3SL, YJSL, YSL)>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NSZ-001-010		PANEL,FR
2	8B-NSZ-002-010		PANEL,SP
3	8B-NSZ-004-010		PROTECTOR,SP
4	8B-NSZ-602-010		SPKR,W 140 30/4<YJ3SL,YJSL>
4	8B-NSZ-604-010		SPKR,W 140 25/4<YSL>
5	8B-NSK-604-010		SPKR,T 60<YJ3SL,YJSL>
5	8B-NSK-610-010		SPKR,T 60L<YSL>
6	87-NS7-611-010		CORD,SPKR
7	8B-NSZ-012-010		RING,W
8	8B-NSZ-011-010		PANEL,DUCT BL
9	8B-NSZ-013-010		PANEL,DUCT B

ACCESSORIES / PACKAGE LIST

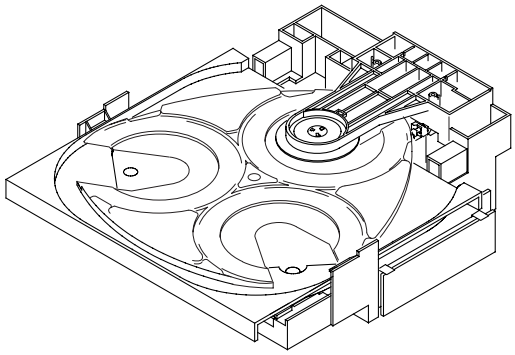
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NH8-901-010		IB,H (ECA)M
2	8B-NH8-702-010		RC UNIT,RC-BAS05 VS
3	87-006-226-010		ANT,LOOP AM
4	87-043-115-010		FEEDER-ANT,FM
5	87-A90-119-010		ANT,WIRE SW (5M)
⚠ 6	87-A92-262-010		PLUG,CONVERSION WT01011
7	87-A80-167-010		CORD,PIN 1PY 150CM
8	87-A90-173-010		F-BEAD,9-20-21 ZCAT2017-093

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2–11, IKENOHATA 1–CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

9301978 9720501 921338 Printed in Singapore

aiwa SERVICE

BZG-5 English



SERVICE MANUAL

CD MECHANISM BASIC CD MECHANISM : KSM-2131 FAM

TYPE	BASIC CD MECHANISM
ZD4GN1C1	KSM-2131 FAM

aiwa

S/M Code No. 09-023-353-3NA

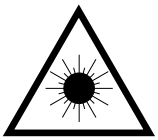
DATA

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

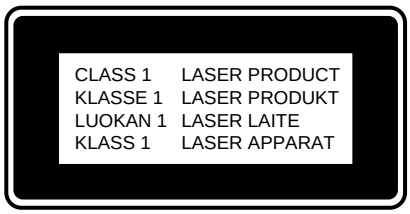
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

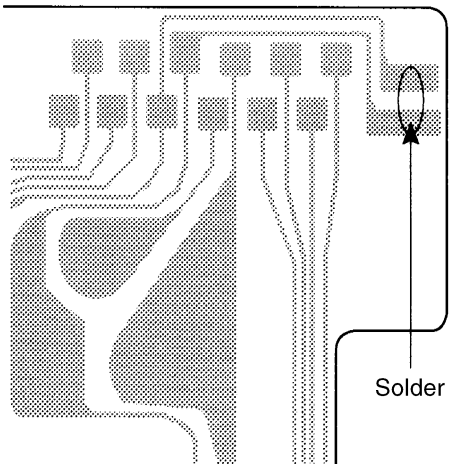


Precaution to replace Optical block (KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

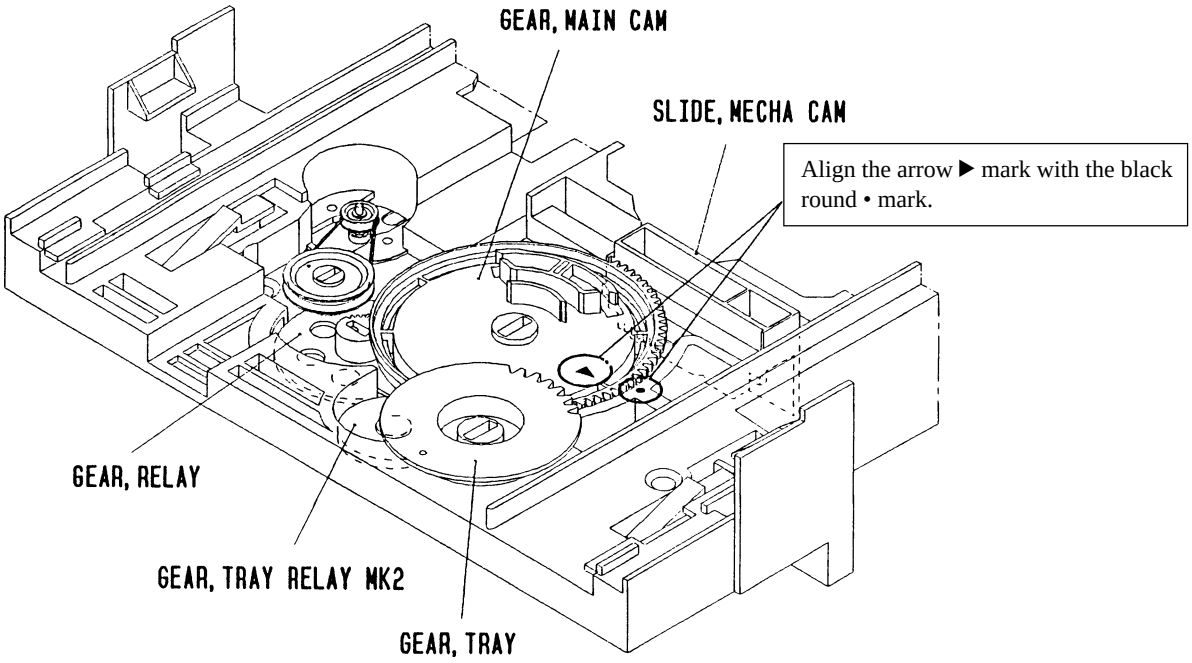
PICK-UP Assy PWB



How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.



ELECTRICAL PARTS LIST -1/3

! = ⚠ SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME		SUFFIX&MODEL
							BZA-1 ZD4N1C
3CD		O	C 1	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 101	87-A10-504-080	C-CAP,U 0.047-16 K B		a
3CD		O	C 102	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 103	87-012-195-080	C-CAP,U 100P-50 J CH GRM		a
3CD		O	C 104	87-012-282-080	C-CAP,U 4700P-50 K B GRM		a
3CD		O	C 105	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 106	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 107	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 108	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 109	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 110	87-010-405-080	CAP,E 10-50 M 11L SME		a
3CD		O	C 111	87-010-401-080	CAP,E 1-50 M 11L SME		a
3CD		O	C 114	87-012-188-080	C-CAP,U 47P-50 J CH GRM		a
3CD		O	C 115	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 116	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 117	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 118	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 121	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 122	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 123	87-012-169-080	C-CAP,U 7P-50 D CH		a
							BZA-1 ZD4N1C
3CD		O	C 124	87-012-172-080	C-CAP,U 10P-50 D CH		a
3CD		O	C 125	87-016-083-080	C-CAP,S 0.15-16 K R		a
3CD		O	C 126	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 127	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 128	87-A10-504-080	C-CAP,U 0.047-16 K B		a
3CD		O	C 129	87-010-403-080	CAP,E 3.3-50 M 11L SME		a
3CD		O	C 130	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 131	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 132	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 133	87-010-405-080	CAP,E 10-50 M 11L SME		a
3CD		O	C 134	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 135	87-010-260-080	CAP,E 47-25 M 11L SME		a
3CD		O	C 136	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 137	87-A10-915-080	C-CAP,U 1000P-25 J CH		a
3CD		O	C 138	87-012-349-080	C-CAP,S 1000P-50 J CH GRM		a
3CD		O	C 2	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 203	87-010-112-080	CAP,E 100-16 M 11L SME		a
3CD		O	C 204	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 205	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 208	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
							BZA-1 ZD4N1C
3CD		O	C 212	87-010-405-080	CAP,E 10-50 M 11L SME		a
3CD		O	C 213	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 3	87-A10-915-080	C-CAP,U 1000P-25 J CH		a
3CD		O	C 301	87-010-382-080	CAP,E 22-25 M 11L SME		a
3CD		O	C 302	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 303	87-010-260-080	CAP,E 47-25 M 11L SME		a
3CD		O	C 304	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 305	87-012-274-080	C-CAP,U 1000P-50 K B GRM		a
3CD		O	C 306	87-A11-567-080	C-CAP,S 0.01-50 K B	X	a
3CD		O	C 4	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB		a
3CD		O	C 401	87-012-195-080	C-CAP,U 100P-50 J CH GRM		a
3CD		O	C 402	87-012-195-080	C-CAP,U 100P-50 J CH GRM		a
3CD		O	C 403	87-012-195-080	C-CAP,U 100P-50 J CH GRM		a
3CD		O	C 404	87-012-195-080	C-CAP,U 100P-50 J CH GRM		a
3CD		O	C 405	87-012-195-080	C-CAP,U 100P-50 J CH GRM		a
3CD		O	C 5	87-010-263-080	CAP,E 100-10 M 11L SME		a
3CD		O	C 6	87-010-405-080	CAP,E 10-50 M 11L SME		a
3CD		O	CN 1	87-A60-429-010	CONN,16P H TOC-A		a
3CD		O	CN 201	84-ZG1-648-010	CONN ASSY,6P		a
3CD		O	CN 202	87-A60-130-010	CONN,5P V FE		a
							BZA-1 ZD4N1C
3CD		O	CN 301	87-A60-154-010	CONN,6P H FE		a
3CD		O	CN 401	87-099-201-010	CONN,8P H BLK 6216		a
3CD		S	D 101	87-A40-743-080	ZENER,UZ4.3BSA		a
3CD		S	D 102	87-020-465-080	DIODE,1SS133		a
3CD		S	D 301	87-A40-753-080	ZENER,UZ6.8BSB		a
3CD		S	D 302	87-A40-313-080	C-DIODE,MC2840		a
3CD		S	IC 101	87-A21-821-130	C-IC,LC78645NE		a
3CD		S	IC 201	87-A21-822-010	IC,LA6568		a
3CD		O	L 101	87-005-469-080	COIL,4.7UH J FLR50		a
3CD		S	Q 1	87-026-609-080	TR,KTA1266GR		a
3CD		S	Q 101	87-026-610-080	TR,KTC3198GR		a
3CD		S	Q 301	87-A30-076-080	C-TR,2SC3052F		a
3CD		S	Q 302	87-A30-515-080	TR,2SA1979O/Y		a
3CD		S	Q 303	87-A30-515-080	TR,2SA1979O/Y		a
3CD		S	Q 304	87-A30-515-080	TR,2SA1979O/Y		a
3CD		S	Q 305	87-A30-515-080	TR,2SA1979O/Y		a
3CD		S	Q 306	87-A30-515-080	TR,2SA1979O/Y		a
3CD		S	Q 307	87-A30-075-080	C-TR,2SA1235F		a
3CD		O	R 104	87-012-286-080	C-CAP,U 0.01-25 K B GRM		a
3CD		O	R 106	87-012-274-080	C-CAP,U 1000P-50 K B GRM		a

ELECTRICAL PARTS LIST -2/3

! = ⚠ SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

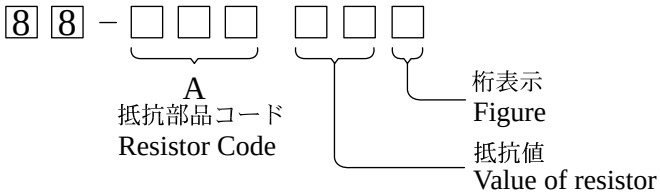
UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						BZA-1 ZD4N1C
3CD		O	SW 401	87-036-109-010	SW,MICRO SPPB61	a
3CD		O	SW 402	87-036-109-010	SW,MICRO SPPB61	a
3CD		O	X 101	87-A70-318-010	VIB,XTAL 33.8688MHZ CSA-309	a
T.T		O	C 401	87-A11-148-080	CAP,TC U 0.1-50 Z F	a
T.T		O	CON401	86-NFZ-675-010	CONN,5P H 6216-11H	a
T.T		O	M 401	87-045-364-010	MOT,BCH3B	a
T.T		O	PS 401	87-A90-156-010	SNSR,SG-240	a
T.T		X	R 408	88-121-561-080	RES,560-1/8W J	a
T.T		X	R 409	88-121-273-080	RES,27K-1/8W J	a
MOTOR		O	M 2	9X-262-513-210	2M SLED MOTOR	a
MOTOR		O	PIN3	91-564-722-110	1C CONNECTOR 6P	a
MOTOR		O	SW 1	91-572-085-110	1B LEAF SW	a

ELECTRICAL PARTS LIST-3/3

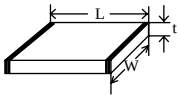
Regarding connectors, they are not stocked as they are not the initial order items.
The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

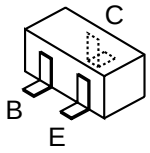
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code：A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

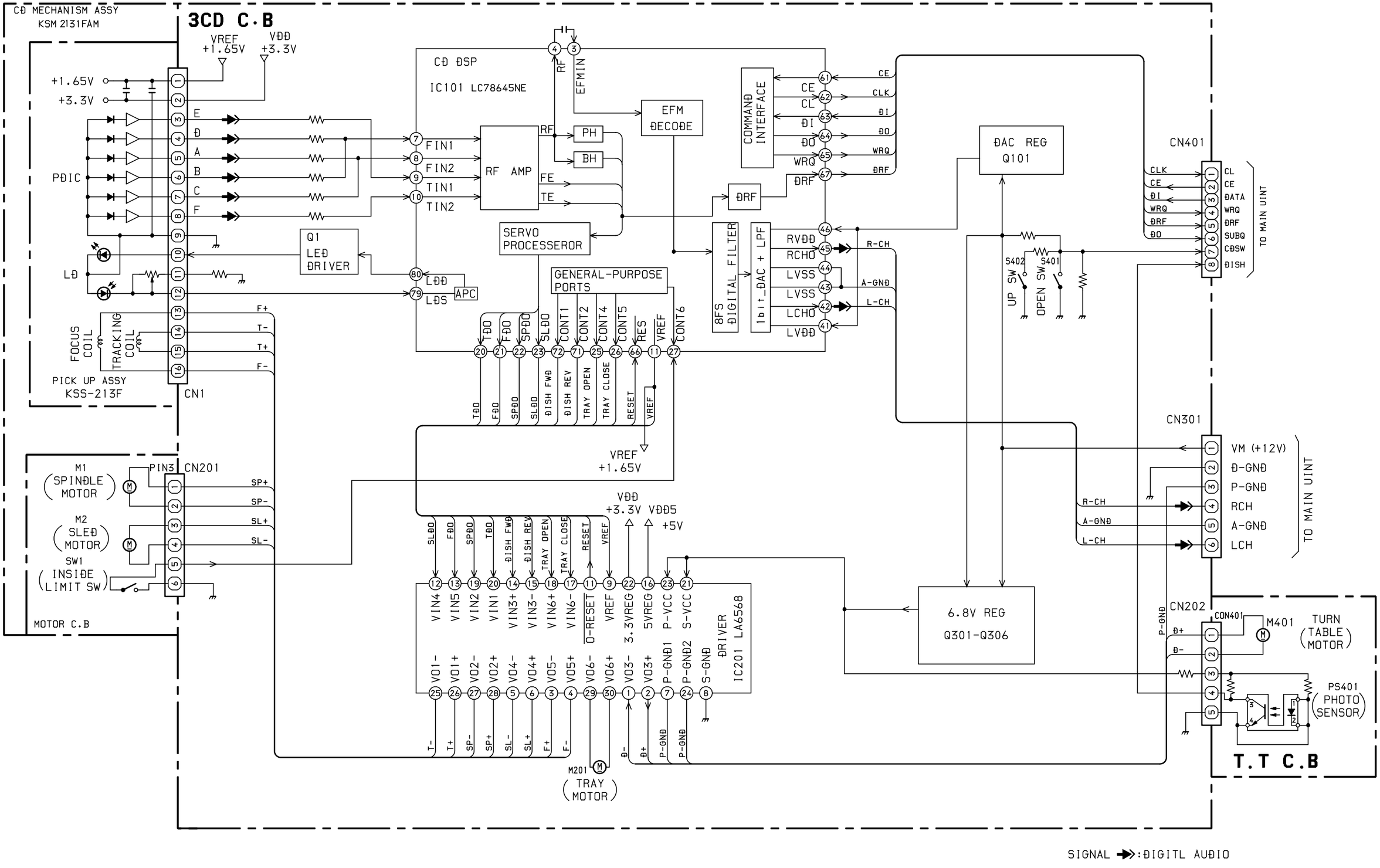
TRANSISTOR ILLUSTRATION-1/1



2SC3052
2SA1235

KTA1266
KTC3198
2SA19790

BLOCK DIAGRAM-1/1



SIGNAL ➔➔:DIGITL AUDIO

3CD C.B

TO MAIN UNIT

TO MOTOR C.B
PIN3

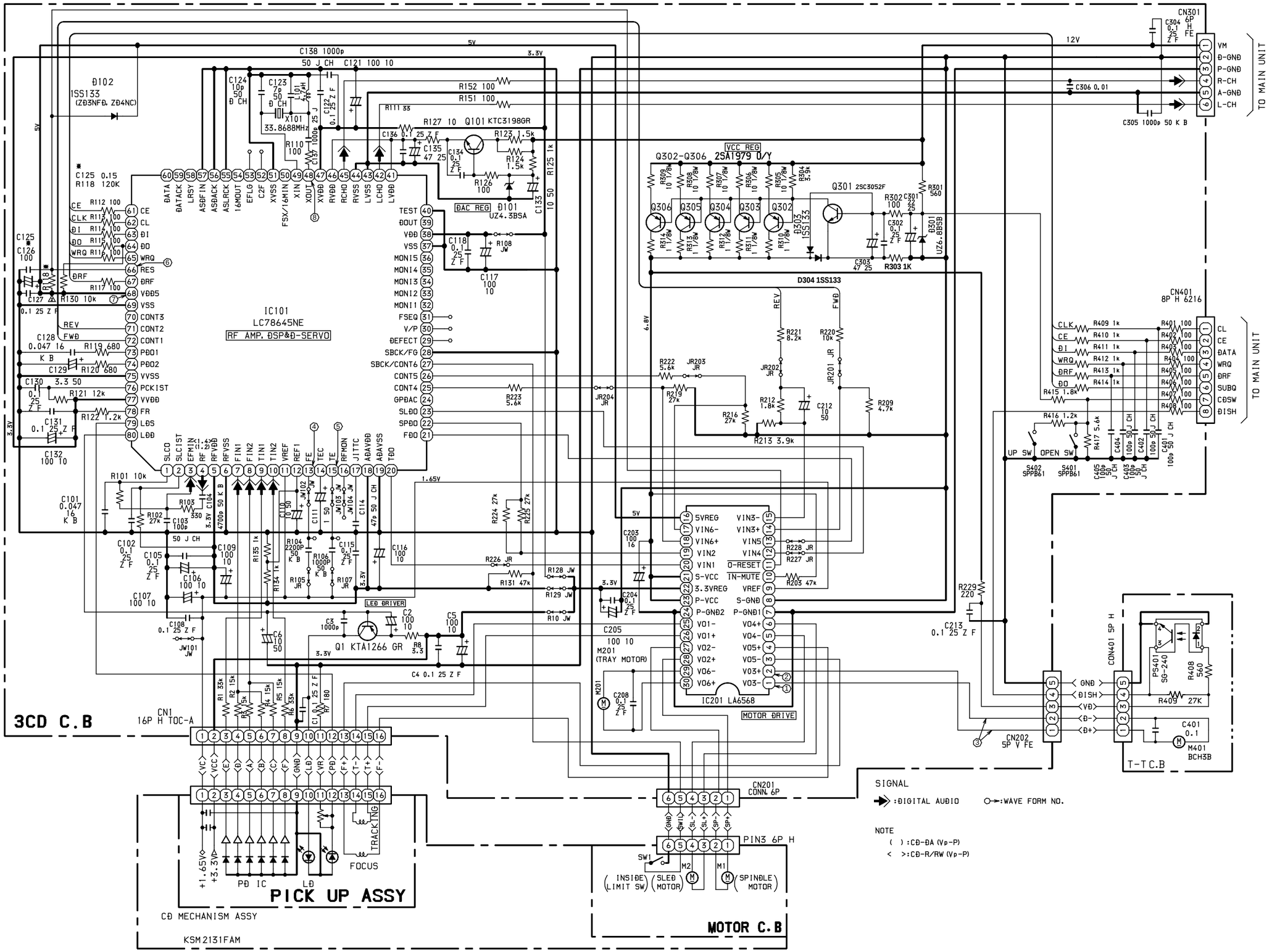
KSS-213F
PICK UP ASSY

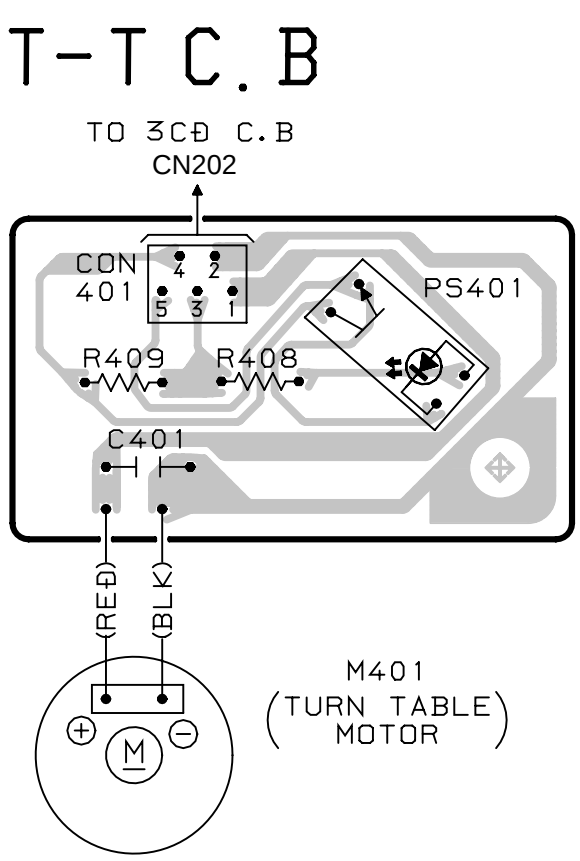
TO MAIN UNIT

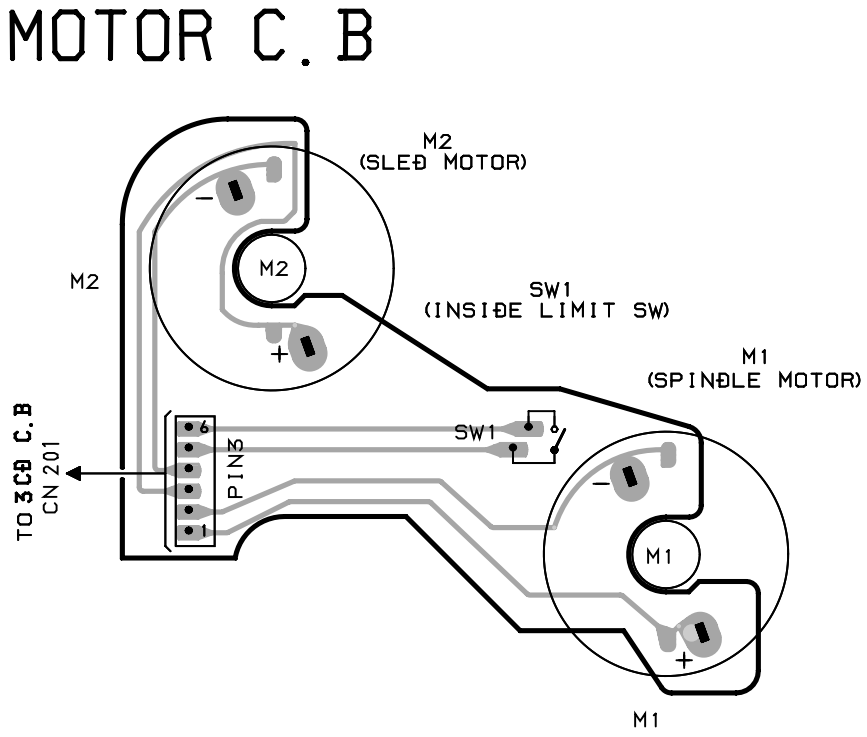
CN401
CN201
CN1
CN301
CN202
S401 (UP)
S402 (OPEN)
Q101
Q1
Q301
Q302
Q303
Q304
Q305
Q306
D101
D102
D301
D303
D304
IC101
IC201
L101
X101
M201 (TRAY MOTOR)

TO T-T C.B
CON401

SCHEMATIC DIAGRAM-1/1



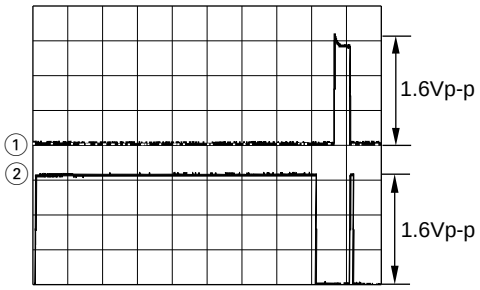

T-T C.B
TO 3CÐ C.B
CN202
CON
401
4 2
5 3 1
PS401
R409
R408
C401
(REÐ)
(BLK)
M401
(TURN TABLE
MOTOR)


MOTOR C.B
M2
(SLEÐ MOTOR)
M2
SW1
(INSIÐE LIMIT SW)
M1
(SPINÐLE MOTOR)
SW1
TO 3CÐ C.B
CN 201
PIN6
M1
M1

WAVE FORM-1/1

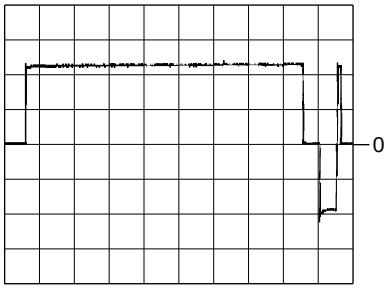
① IC201 ① (Vo3-)
② IC201 ② (Vo3+)

VOLT/DIV: 500mV
TIME/DIV: 200mS



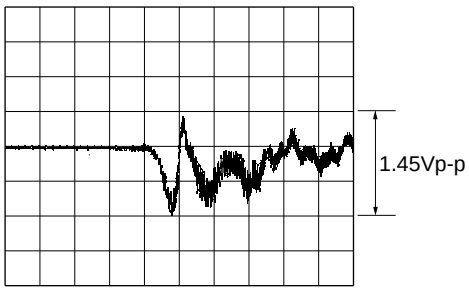
③ Between CN202 ① and ②
(② Pin: 0 Level)

VOLT/DIV: 1V
TIME/DIV: 200mS



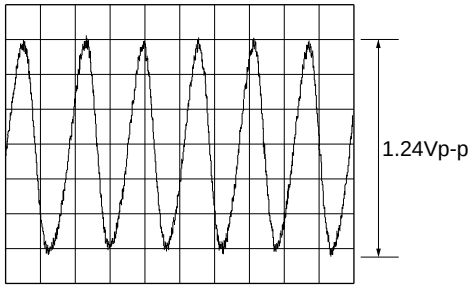
④ IC101 ⑬ (FE)

VOLT/DIV: 500mV
TIME/DIV: 5mS



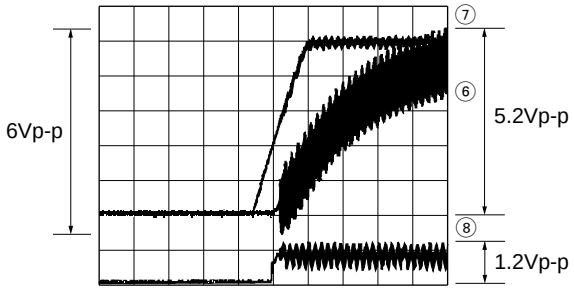
⑤ IC101 ⑮ (TE)

VOLT/DIV: 200mV
TIME/DIV: 200µS



⑥ IC101 ⑯ (RES)
⑦ IC101 ⑱ (VDD5)
⑧ IC101 ㊽ (XOUT)

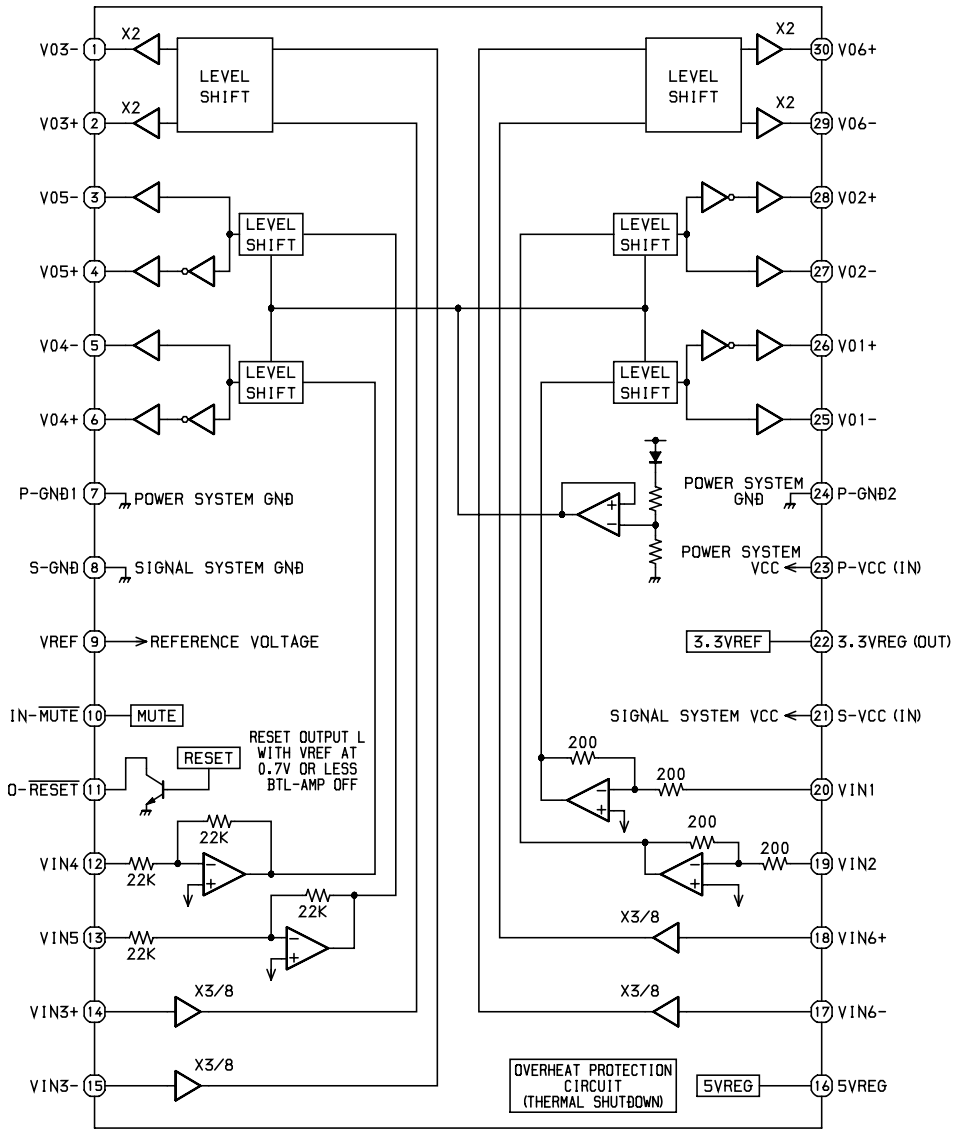
VOLT/DIV: 1V
TIME/DIV: 10mS



⑥ IC101 ⑯ (RES)
⑦ IC101 ⑱ (VDD5)
⑧ IC101 ㊽ (XOUT)

VOLT/DIV: 1V
TIME/DIV: 10mS

IC BLOCK DIAGRAM-1/1
IC, LA6568



Pin No.	Pin Name	I/O	Description	
1	SLCO	O	Slice level control	Control output.
2	SLCIST	I		SLCO output current adjustment resistor connection pin.
3	EFMIN	I		RF signal input pin.
4	RF	O	RF monitor pin.	
5	RFVDD	—	RF power supply pin.	
6	RFVSS	—	RF ground pin.	
7	FIN1	I	A+C signal input pin.	
8	FIN2	I	B+D signal input pin.	
9	TIN1	I	E signal input pin.	
10	TIN2	I	F signal input pin.	
11	VREF	O	VREF voltage output pin.	
12	REFI	I	Reference voltage output setting pin.	
13	FE	O	FE signal monitor pin.	
14	TEC	O	TE signal LPF capacitor connection pin.	
15	TE	O	TE signal monitor pin.	
16	RFMON	O	RF internal signal monitor pin.	
17	JITTC	O	Jitter detection capacitor connection pin.	
18	ADAVDD	—	Servo A/D, D/A supply pin.	
19	ADAVSS	—	Servo A/D, D/A ground pin.	
20	TDO	O	Tracking control output pin. D/A output.	
21	FDO	O	Focus control output pin. D/A output.	
22	SPDO	O	Spindle control output pin. D/A output.	
23	SLDO	O	Thread control output pin. D/A output.	
24	GPDAC	O	Servo D/A general-purpose output pin. (Not connected)	
25, 26	CONT4, 5	I/O	General-purpose input/output pin 4, 5.	
27	SBCK/CONT6	I/O	General-purpose input/output pin 6, or subcode read clock input pin.	
28	SBCK/FG	I	Subcode read clock input pin/FG signal input pin/external emphasis setting pin. Set to command -pin function.	
29	DEFECT	O	Defect pin.	
30	V/P	O	Rouge servo/phase control automatic switching monitor output pin. “H” for rough servo and “L” for phase servo.	
31	FSEQ	O	Synchronization signal detection output pin. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree.	
32, 36	MONI1, 5	O	Internal signal monitor pin 1, 5. (Not connected)	
37	VSS	—	Digital ground pin.	
38	VDD	—	Digital power supply pin.	
39	DOUT	O	Digital OUT output pin.	
40	TEST	I	Test input pin.	
41	LVDD	—	L channel D/A converter	Lchannel power supply pin.
42	LCHO	O		L channel output pin.

Pin No.	Pin Name	I/O	Description	
43	LVSS	—	L channel D/A converter	L channel ground pin.
44	RVSS	—	R channel D/A converter	R channel ground pin.
45	RCHO	O		R channel output pin.
46	RVDD	—		R channel power supply pin.
47	XVDD	—	Crystal oscillator	Crystal oscillator power supply pin.
48	XOUT	O		Connection for a 33.8688MHz crystal oscillator pin.
49	XIN	I		
50	FSX/16MIN	I/O	7.35kHz synchronization signal output pin. DF, DAC external clock input pin. (Not connected)	
51	XVSS	—	Crystal oscillator	Crystal oscillator ground pin.
				Must be connected to 0V.
52	C2F	O	C2 flag output pin.	
53	EFLG	O	C1, C2 error correction monitor pin.	
54	16MOUT	O	16.9344MHz output pin. (Not connected)	
55	ASLRCK	I	Antishock mode	L/R clock input pin.
56	ASDACK	I		Bit clock input pin.
57	ASDFIN	I		L/R channel data input pin.
58	LRSY	O	Digital data output	L/R clock output pin. (Not connected)
59	DATACK	O		Bit clock output pin. (Not connected)
60	DATA	O		L/R channel data output pin. (Not connected)
61	CE	I	Microprocessor interface	Chip enable signal input pin.
62	CL	I		Data transfer clock input pin.
63	DI	I		Data input pin.
64	DO	O		Data output pin. (Nch open drain output)
65	WRQ	O		Interruption signal output pin.
66	RES	I	Reset input pin. This pin must be set low briefly after power is first applied.	
67	DRF	O	Focus ON detect pin.	
68	VDD5	—	Microprocessor interface power supply pin.	
69	VSS	—	Digital ground pin.	
70	CONT3	I/O	General-purpose output pin 3. (Not connected)	
71, 72	CONT2, 1	I/O	General-purpose output pin 2, 1.	
73, 74	PD01, 2	O	PLL	Phase comparison output pin 1, 2 to control built-in VCO.
75	VVSS	—		Built -in VCO GND pin.
76	PCKIST	I		Resistor connection pin to set current for PD01 and 02 outputs.
77	VVDD	—		Built-in VCO power supply pin.
78	FR	I		Resistor connection pin to set the frequency range of built-in VCO.
79	LDS	I	Laser power detection signal input pin.	
80	LDD	O	Laser power control signal output pin.	

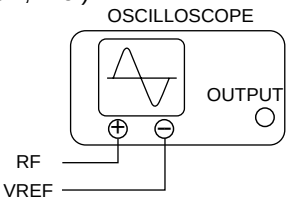
CD ELECTRICAL MEASUREMENT

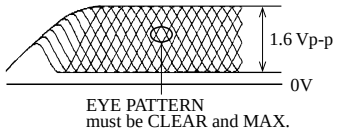
- Perform the measurement after the machine enters the test mode.
- Place the CD mechanism horizontally level.
- Equipment and tools required

Measuring equipment: Oscilloscope (Use the probe of 10:1)
Digital Multimeter (Use it in the DC Volt range.)
Jitter meter (Kikusui 6235 or equivalent)
Test disc: TCD-782
ATD-001

1. RF Waveform Check

1) Connect an oscilloscope to test point (IC101 4pin, RF), (IC101 11pin, Vref).
2) Play back the 2nd track of the TCD-782.
3) Check to see that the RF waveform has the maximum amplitude and the center of the wedge waveform has the clear blank.

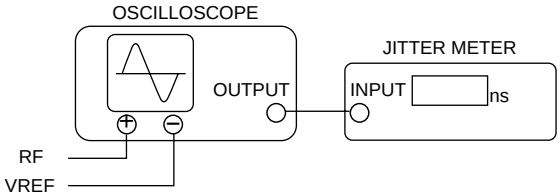




VOLT/DIV: 500mV
TIME/DIV: 0.5µS
AC INPUT

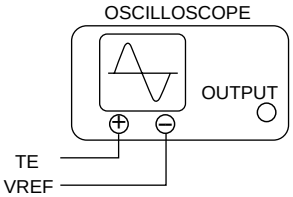
2. Jitter Check

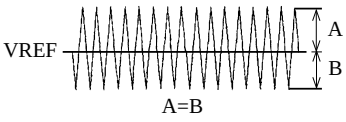
1) While an oscilloscope is kept connected in the same test point as in the 2. RF Waveform Check, connect the output terminal of an oscilloscope to the input terminal of a jitter meter.
2) Set the VOLT range selector of an oscilloscope to 500 mV range or lower.
3) Play back the 2nd track of the TCD-782.
4) Check to see that a jitter meter indicates 40.0 ns or less.



3. Tracking Balance Check

1) Connect an oscilloscope to test point (TE), (VREF).
2) Play back the 2nd track of the TCD-782 and press the PAUSE button.
3) Check to see that the traverse waveform on an oscilloscope is vertically symmetrical.





VOLT/DIV: 500mV
TIME/DIV: 1mS
DC INPUT

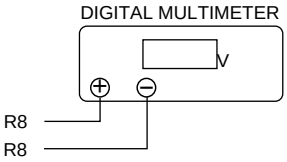
4. Play-ability Check

1) Play back the 4th, 9th and 13th track of ATD-001. Check to see that noise does not occur and sound skipping does not occur.

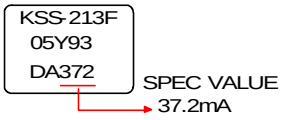
5. Laser Current Check

*Do not perform this measurement unless the laser is suspected to be defective.

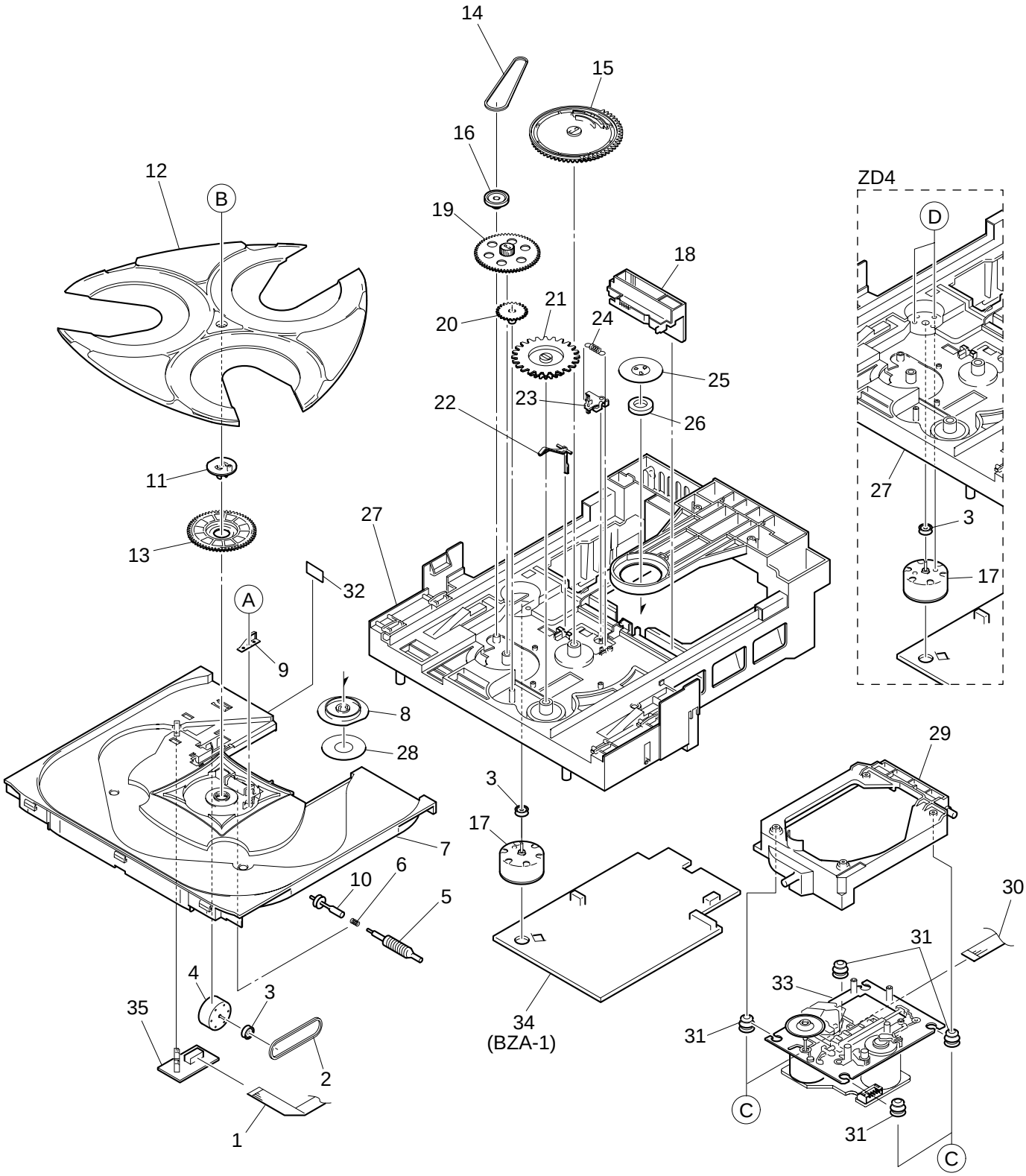
1) Connect a Digital Multimeter across the resistor R8 (3.3 ohms).
2) Play back the TCD-782 and check the DC voltage value on a Digital Multimeter.
3) Calculate the laser current (Iop) by dividing the DC voltage across R8 by the resistor value.
Laser current (Iop) = DC voltage across R8 divided by the resistor value (3.3 ohms).



EXAMPLE



MECHANICAL EXPLODED VIEW-1/1



MECHANICAL PARTS LIST -1/1

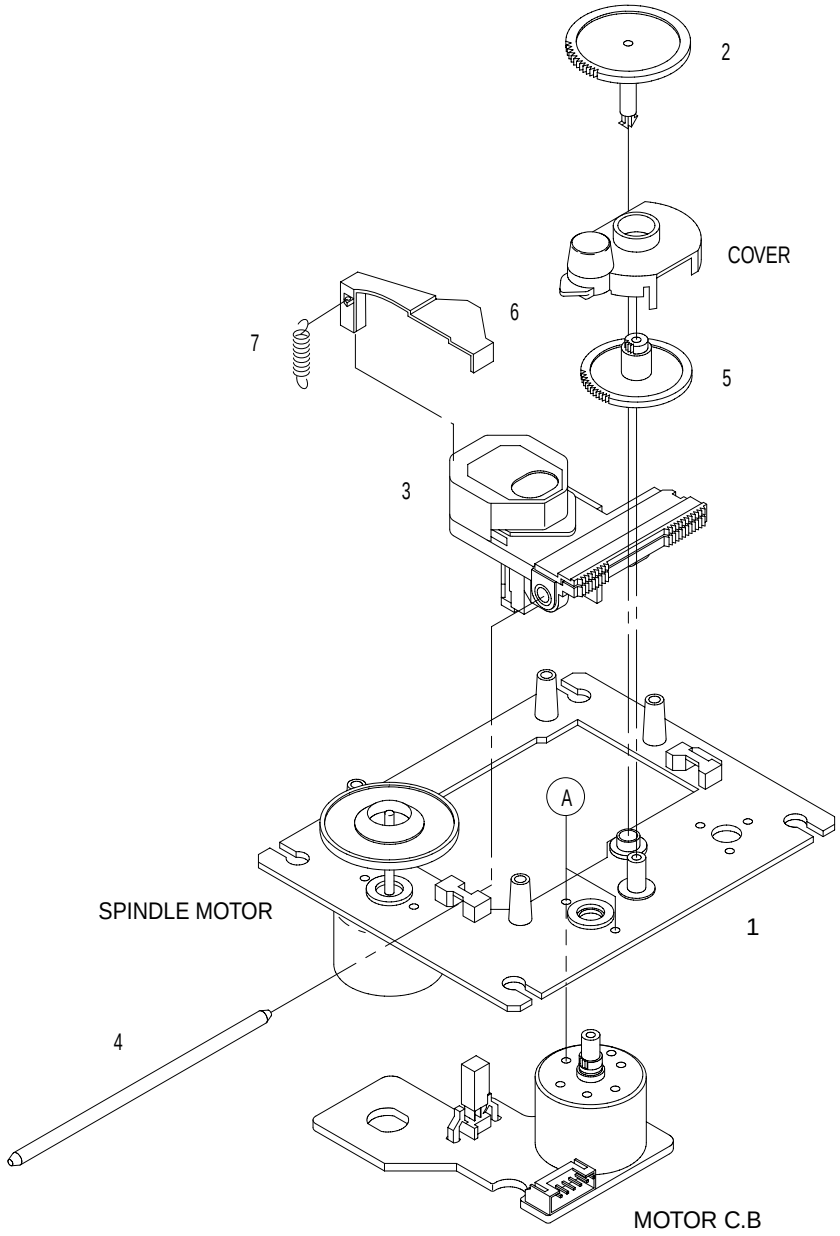
! = ⚠ SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL
						BZG-5 ZD4GN1C1
		O	SC1001	84-ZG1-672-010	F-CABLE,5P 1.25 210MM WHITE N	a
		O	SC1002	84-ZG1-225-010	BELT,SQ1.0-63.3	a
		O	SC1003	84-ZG1-267-010	PULLEY,LOAD MO 8	a
		O	SC1004	87-045-364-010	MOT,BCH3B	a
		O	SC1005	84-ZG1-238-010	GEAR,WORM N	a
		O	SC1006	84-ZG1-248-010	SPR-C,WORM	a
		O	SC1007	8B-ZG9-001-010	TRAY,GRA	a
		O	SC1008	84-ZG1-283-210	HLDR,MAGNET V 4	a
		O	SC1009	84-ZG1-259-010	SPR-P,WORM	a
		O	SC1010	84-ZG1-273-010	PULLEY,WORM 4	a
		O	SC1011	84-ZG1-224-010	LEVER,TT	a
		O	SC1012	8B-ZG5-001-010	TURN TABLE,GRA	a
		O	SC1013	84-ZG1-269-010	GEAR,MAIN TT 4	a
		O	SC1014	84-ZG1-209-010	BELT,SQ1.8-117.7	a
		O	SC1015	84-ZG1-215-410	GEAR,MAIN CAM BLU	a
		O	SC1016	84-ZG1-271-010	PULLEY,RELAY 8	a
		O	SC1017	87-045-383-010	MOT,M9I T2	a
		O	SC1018	84-ZG1-216-310	SLIDE,MECHA CAM YEL	a
		O	SC1019	84-ZG1-206-110	GEAR RELAY	a
		O	SC1020	81-ZG1-250-110	GEAR,TRAY RELAY MK2*	a
						BZG-5 ZD4GN1C1
		O	SC1021	84-ZG1-205-210	GEAR,TRAY (*)	a
		O	SC1022	83-ZG3-213-010	LVR,SW	a
		O	SC1023	84-ZG1-208-210	LEVER,CAM	a
		O	SC1024	84-ZG1-211-010	SPR-E,CAM S	a
		O	SC1025	84-ZG1-285-010	PLATE,MAGNET BLK	a
		O	SC1026	83-ZG3-604-010	RING,MAG 2	a
		O	SC1027	84-ZG1-232-210	CHAS,MECHA N	a
		O	SC1028	8A-ZG1-214-110	SH, 25-40-0.5 PC	a
		O	SC1029	84-ZG1-212-210	HLDR,MECHA NO2	a
		O	SC1030	85-NFT-611-110	FF-CABLE 16P-1.0	a
		O	SC1031	80-CD3-214-010	CUSH CD A	a
		X	SC1032	84-ZG1-242-010	CUSH-G 8-6-1	a
		X	SC1033	M8-1ZK-19A-170	KSM-2131FAM	a
		X	SC1034	A8-BZA-19A-070	BZA-1 ZD4N1C	a
		X	SC1035	84-ZG1-665-010	PWB,T-T	a
		O	SC1A	87-067-981-010	BVT2+3-6 BLK	a
		O	SC1B	87-B10-331-010	VF+3-6 BLK	a
		O	SC1C	81-ZG1-271-010	S-SCREW,MECH REAR	a
		O	SC1D	87-251-070-410	U+2.6-3	a

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green	HT	Transparent Gray
HM	Metallic Gray	NH	Champagne Gold	M	Wood Pattern

CD MECHANISM EXPLODED VIEW-2/2 (KSM-2131FAM)



CD MECHANISM PARTS LIST-2/2 (KSM-2131FAM)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	9X-264-629-220		MOTOR CHASSIS ASSY(MB)(FR)
2	92-626-907-010		GEAR(A)(S)
3	87-A90-836-010		OPTICAL PICK UP KSS-213F
4	92-626-908-020		SHAFT SLED
5	92-627-003-010		GEAR(B)
6	92-646-697-020		LENS SHUTTER(F)
7	92-646-702-010		SPRIG EXTENSION
A	97-621-255-150		SCREW+P2-3

アイワ株式会社
AIWA CO.,LTD.
〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110-8710, JAPAN TEL:03 (3827) 3111

0251431